

## BIG

HISTORY
from the big bang to the present


Big History: From the Big Bang to the Present
Cynthia Stokes Brown

## Download now

Read Online $\theta$

## Big History: From the Big Bang to the Present

## Cynthia Stokes Brown

## Big History: From the Big Bang to the Present Cynthia Stokes Brown

'Big History' begins when the universe is no more than a single point the size of an atom and ends with a 21st century world inhabited by 6.1 billion people. It's a story that takes in prehistoric geography, human evolution, the agrarian age, the Black Death, the voyages of Columbus, the Industrial Revolution and global warming.

## Big History: From the Big Bang to the Present Details

Date : Published September 16th 2007 by New Press, The (first published September 1st 2007)
ISBN : 9781595581969
Author : Cynthia Stokes Brown
Format : Hardcover 304 pages
Genre : History, Science, Nonfiction, World History
$\downarrow$ Download Big History: From the Big Bang to the Present ...pdf

Eead Online Big History: From the Big Bang to the Present ...pdf

Download and Read Free Online Big History: From the Big Bang to the Present Cynthia Stokes Brown

# From Reader Review Big History: From the Big Bang to the Present for online ebook 

Naz (Read Diverse Books) says

I found the first third of "Big History" fascinating because Cynthia Brown told our Universe's story using the language of science. I'm simply a sucker for cosmology and astronomy. I was therefore disappointed when her narrative turned to more modern times and began sounding like a boring history book. Nevertheless, Brown must be commended for condensing the history of homo sapiens from the point of our birth to the present trouble we're in as population and industrial growth outpace the planet's natural resources. This book is replete with facts and I would dare almost anyone to not find something personally marvelous or interesting as they read.

I'm fully behind the the idea of "Big History" because most people tragically lack the context and perspective to meaningfully understand our universe. Young people especially would benefit from exposure to the "From the Big Bang to the Present" narrative. Their understanding of the universe on a grand scale could only benefit everyone.


#### Abstract

Ana says the characters were so well written"... yeah, no. but! i could eat books like these up! so many facts, from every possible domain: chemistry, phisics, what I learned from this: - what the word "hinduism" means - what the word "barbaric" means - i got reminded of Broca's area - Corpus Callus, the same - Godwana - the different emergence of humans as a species in the world - and many fucking more...


ok. five stars as in "this gave me a lot of information", not as in "omg the writing was just mind-blowing and medicine, philosophy, religion etc. i am a sucker for books that contain trivia because besides school, documentaries and works that happen to contain valid facts of history, $i$ really have nothing to rely upon.

## ?. ????? says

?? ???? ????? ?????? ???? ???? ?????? ?? ??? ?????? ???? ???? ?? ???????? ?????? ?????.. ???? ?? ??? ?????? "????? ??????? ??????" ???? ???? ?????? ?? ?????????? ?????? ??????? ??? ????????? ???? ???? ????? ?? ?????? ??????? ?????? ??? ?? ??? ?? ????.. ????? ????? ??????? ??? ???? ??? ?????? ???? ????? ?? ??? ?? 13 ????? ??? ?? ???? ??? ?????.
????? ????? ?? ??? ?????? ?? ??? ???? ???????? ???? ????? ?????? ?????? ???? ??????? ?? ??????? ????????? ????????? ???? ????? ????? ?????? ??? ?? ?? ???? ????.. ??? ??????? ?? ?????? ???? ????? ??? ???.. ???? ?????? ??????? ?????? ??? ?? ?? ?????? ?? ???. ???? ??? ??? ??? ????.
??????? ???? ?????? ?????? "????? ???????? ??????" ??????? ?????? ???????? ????? ???? ???? ???? ??? ????? ?????. ???? ????? ??????? ???? ?? ???? ?????? ?? ??? ???? ????? ???? ??? ???? ??? ???????? ????? ?? ?????? ????? ??? ?????? ????? ???? ??? ?? ???? ??? ??? ????????? ?????????? ?? ?????? ??????? ???????? ?? ???? ?????? ??? ?? ???????. ????? ????? ??????? ?????? ????? ???? ???????? ??????? ?? ?? ???????? ????? ????? ?? ???? ???? ????? ?? ?? ????? ??? ?????? ??? ?????? ???? ???.. ??? ?????? ???? ?? ????? ?? ????? "?????? ????????" ????? ???? ????? ??? ???????? ???????? ???????? ????? ????????? ??? ????? ?? ?????? ??????? ????? ???? ??????? ??? ?? ??????? ?????? ?? ??????!
???? ??? ?? ?? ?? ???? ??????? ?? ??? ??? ???????? ??????? ????? ???? ????? ?? ???? ??? ???????? ??? ?? ????? ?? ?????? ???? ??? ????? ?????? ????????? ?????? ????????? ??????? ??????. ???? ??????? ???????? ????? ?? ???????????? ????????????? ????? ????? ???? ????? ??? ????? ????? ???????????? ????? ??????? ?? ?????? ??????.. ??? ??? ??? ???? ????? ???? ??? ???? ??? ???? ?????? ???? ?????? ????? ???.. ??? ??????? ???????? ??????? ?? ???? ??? ??? ???? ?????? ???? ?????? ???????????? ??? ?????? ???? ????? ??? ?? ?????? ??? ??????? ?? ??? ????.
???? ?????? ???????????? ??? ????? ?????? ??? ??? ????.. ??? ?? ?? ??? ????? ??? ??????? ?????? ??? ???? ??? ?????? ????????? ??????? ?? ??? ??? ????? ????? ???? ????? ?????? ??????? ?? ??? ??????? ???? ???? ??? ?? ??? ???????????? ????? ?????? ????? ?? ???? ?????? ???? ????? ???? ?? ??? ????? ?? ????? ?????? ?? ?????? ?? 5 ?????. ???????? ???? ??? ??? ????? ???? ?????? ???????? ????? ??? ??? ?????? ????? ?????? 180 ????? ???? ??? ?? ?????? ????? ?? ???????. ?????? ????? ?????? ????? ????? ????? ???? ??????? ???????????? ????? ??????? ??? ?? ????? ????? ??????? ?? ???? ?? ????. ??? ????? ???????? ??? ?????? ??? ??????? ???? ????? ?? ??? ??? ??? ???????? ???????? ?? ????? ??????? ??? ??? ??? ???? ?????? ?? ??? ??? ???? ?? ????? ????? ?????? ????? ??? ???? ????? ????? ???? ????? ???? ?? ???? ???????.
??? ???? ??? ????? ???????? ????????? ????????? ????? ???? ??????? ??? ????? ?????? ???? ???? ?????? ???? ????????????? ???? ????? ??????? ???????-????? ??? ??????? ?????? ???- ?????? ?? ???????? ??????? ???????????? ?????????? ????? ???? ???? ?????????? ????? ??????? ??????? ??? ???????
??? ?????? ??? ?? ???????? ????????? ????????? ??? ???????????? ??? ?????? ?????. ????? ?????? ????? ??? ?????? ???????? ?? ????? ???? ????? ??????? ?????? ????? ?????? ?? ????? ?? ????? ??????????. ?????? ?????? ?? ??????? ???? ?? ???? ???????????? ???? ????? ????.
???????? ???? ???? ???? ????? ?????? ???????? ?????? ????? ???????? ??? ??????? ??????? ??????? ???????? ?????? ??? ??????. ?? ????? ??????? ????.

## Noor says

??? ?????? ????? ?????? ????????
??? ?? ????? ?? ???? ???? ?????? ??? ???? ???????.

## Mal Warwick says

In 1989, an American history professor named David Christian was teaching at Macquarie University in Sydney when he offered a course entitled Big History. Rejecting historians' definition of the discipline as beginning with the advent of written records just 5,500 years ago, Christian's course began with the Big Bang, 13.7 billion years in the past. He invited colleagues on the Macquarie faculty to lecture on astronomy, physics, geology, biology, and other scientific disciplines to fill in the billions of years that transpired before any human set foot on our planet. Christian's course proved popular, and the idea spread to historians in other countries. A new sub-discipline was born. There is now an International Big History Association.

## Big History in print

Nearly two decades later, another American historian, Cynthia Stokes Brown, took up the challenge of writing a book about history as Christian had re-conceived it. She had recently retired from Dominican University in California. The result was Big History: From the Big Bang to the Present (2007). While Christian leaned on colleagues in the sciences to carry the story for its first 13.65 billion years, Brown took it all on herself. With a good deal of simplification but relatively few apparent errors, she surveys the prehistorical past with great skill. For anyone who thinks history is the story of wars and generals and presidents, Big History is a worthy remedy.

Responding to overspecialization

Big History is a belated response to the extreme specialization that now characterizes virtually every academic discipline. It's no longer enough to specialize in world history, or even ancient history. A scholar needs to specialize in a particular era in the history of Greece. Candidates for Ph .Ds in history need to go even further. For example, a dissertation might be written about women's role in Spartan society during the Pelopenessian War. Just take a look at the titles of recent doctoral dissertations in nearly any field, if you don't believe me. I, for one, think this is tragic. God may be in the details, but even She could get lost there.

## Other works on Big History

By the way, Christian himself didn't write this book because instead he approached the topic differently. He wrote two textbooks, Maps of Time: An Introduction to Big History, and Big History: From Nothing to Everything, in collaboration with Craig Benjamin. His more accessible treatment of the subject is a 48lecture course he recorded for Great Courses. The title is simply Big History. Bill Gates was so impressed by it that he reportedly financed its distribution to schools to the tune of $\$ 10$ million. I've listened to all 48 lectures and loved it.

## Marc says

This really is a second rate attempt at offering a Big History-survey. Lots of flaws and outdated views. Only the chapters on ecological aspects of history are up to date. Not recommended, I'm afraid. Better read Maps of Time: An Introduction to Big History or The Human Web: A Bird's-Eye View of World History.

## Jan says

If you like premise of Daniel Quinn's Ismael but found the tone somewhat off putting, you might want to try Big History. Instead of beginning with mankind's recorded history, this historian starts her story 13.7 billion years ago with the big bang and string theory and dark matter.

We learn to appreciate the Gaia theory as all life forms on earth share the same genetic code, the same biochemical network. If we telescope the age of the earth to one 24 hour period, humans would appear less than two minutes before midnight and agriculture and cities would appear just a few seconds before midnight.

The rise of man was fueled by agriculture, cities, and later industrialization and technology. The major unresolved challenge obviously is how do to keep our growth from outstripping our finite resources.

A very thoughtful and well-reasoned book.

## Jacob says

There are only so many events in history for which I have a keen interest to learn more about. I'd much rather have a broad, comprehensive view of history than know specifics. If you're like me, then you will love the hell out of this book. Cynthia Stokes Brown reduces the exploits of empires into mere paragraphs. Don't care about the human sacrificial rituals of the Incas, or the proliferation of tobacco, cocoa, tea, and coffee during industrialization? Great! Those topics (among vast others) will only take about 20 seconds of your time.

Of immense importance is the fact that this book is written by a woman (too few history books are). Never is
the reader burdened with the high-horsed vision of humanity as the great conqueror. Instead, events are examined for their true significance and Cynthia succeeds in revealing the all-important connections between the cultures, technologies and events of the world. She remains unbiased toward all groups throughout the entirety of the book and remains properly skeptical when delving into questions of why.

Most commendable of all is that this book takes into account the ecological process and ecological effects of human growth. It does this not because of any agenda, but because it is necessary to know these things in order to develop an accurate picture of the future, and what is the purpose of history if not to help guide us toward a better future? Sure, these parts can be sad and cynical (particularly the last chapter, which speculates on the immediate future), but that's because they reflect the truth about the properties of the Earth and of the human race. Yes, $2 / 3$ of Africa's forests have been destroyed since 10,000 years ago. Yes, humans are the cause of a sixth major period of extinction in Earth's history. Yes, if we don't curb the trends of the human "experiment," we in for some rough times. If you can't handle the truth, go watch some TV.

I believe that this is the most compact yet comprehensive description of the past and (immediate) future available. If you have any desire for a comprehensive and accurate worldview, do yourself a favor and read this book.

## Asim Alzou'bi says

???? ?? ???????? ???????? ??? ???? ????? ????? ?????? ?? ????? ??? ??????? ??????? .. ????? ?? ???? ?? ??? ???????? ???? ??????? ?????? ?? ??????? ??? ???????? ..
???? ?? ???? ???? ????? ???? ?? ?????? ?? ???? ????? ???? ??? ..
????? ?? ???????? ??? ???????? ????? ?? ?????? ????? ???? .. ??? ????? ?? ???????? ????? .. ? ???? ? ?????? ?????? ??????
????? ?? ????? ?????? ????? ?????? ? ????? ??????? ?????? ?? ???? ?????
?????? (???????? ??????) ???? ???????
?????? (???????? ??????) ???? ???????
????? ?????
??? ? ???? ?? ????????? ? ??????? ???????
????? ???
????? ??????
??????? ( ?????)
??????? ( ???????? ? ????? ???)
???????
????????
???????
??? ? ????????
??????????
????????? ? ??????? ????????
??????????? ????????
??????? ????????????? ? ?????? ? ??????? ? ?????? ? ???? ?????? ? ????? ????????? ?
??????????? ????????? ?
???? ??????
?????? ????? ??????
????? ????? ? ?????? .. ? ??????? ? ???????????? ?
???? ?????
?????? ? ??? ???? ? ???? ? ?????????
???????? ??????
????
???? ???? ?? ????? ? ???? ???? ? ???? ???????????? ??????? ? ????? ?????? ? ????? ???????? ? ????????? ? ?????? ( ????? ?? ??????? ) ?
???? ?????? ?
????????
?????
??????
????? ?????
????? ? ?????? ? ?
????? ??? ???????? ?
???? ??? ???? ???? ? ???
????? ???????
????????
?????
???????
???????????
??????????? ?????????
????????
?????????
???????????? ??????????
??????? ????????
????? ??? ?????
??? ???? ? ????
????? ??????
????????? ????????
???????
?????
????? ??????
???????????
???????
????? ??? ?????
??????
???????????
????????
????????? ? ???????
????? ??????
???? ?????
?????? ? ?????? ??? ? ????? ? ??? ?????? ?????? ??? ? ????? ?? ???????? ? ??? ???? ????? ? ???? ???????
??? ????? ?????? ? ???????
??????? ?????????
??? ???
????? ?????? ??? ?????? ? ?????? ? ????
????? ???????
??? ????? ???????
????????
??? ????? ( ??????)
?????? ??????? ???? ?????
?????????
????? ?????? ???????
?????? ???????? ???????
?????? ?????? .. ???? ????? ? ????? ????????
????? ??????? ??????? ????????? ????? ??????? ??????
????????.
????? ? ??????
?????
???????????? ??????????
??? ????????
???????????? ???????? ( ?????)
(????? ??????? ??????)
????? ?????????
???????? ???????? ? ??? ??????? ? ??????? ? ??????? ?????? ? ??????? ?????? ? ????? ? ????? ?????? ? ???? ??????
(????? ????? ??? ?????????? ? ???????) ?
?????? ??????? ? ????????
???????
??????? ? ????? ??????????
??? ??????? ??????? ?? ????????
??????? ??????? ?? ???????
???? ????? ???????
?????? ? ??????? ? ???????
????? ???? ???? ? ??????? ????????????
???? ? ??????? ???????? ?? ?????? ?????????
????? ??????? ? ???????
??????? ? ???????
??????? ?????? : ??????????? ??????????? ?
????? ??????? : ?????????? ? ??????????? ? ??????????
?????? ??? ???????
??????: ???? ??????? ? ??? ????? (???????) ?
?????? ?????? ?? ?????? "?? ???? ??? ?????? ?????? ?? ???? ?? ???? ??????? ? ??????"
??????? ? ?????
??????? ?????? ? ???????
??????? ???? ??????
???? ????? ? ?????? ????????
???????? ? ??????? ? ??????? ? ????? ??????? ? ???????
?????!
***
?? ??? ?????? ????????
?????? ???????? (???????) ? ????? ? ?????? ? ????? ???????? (???? ???) ? ????? ( ???? ????? ) ? ???? ????? ?
????? ?????????
??? ???????
(????? ?????)?
??????? ? ???? ???????? ?
?????????
?????????
???? ???????? ??????? ? ????????? (???? ?? ????? ) ?
????????
?????? ? ????????
???????? ? ?????????
??????? ? ???????? ? ????????? ? ????????????
????? ??? ??? ????? ?? ????? ? ??? ????? ? ??????? ??????? ??????? ?
????? ? ?????? ?????? ?
??????? ??????? ?? ?? ?? ? ?????? ????? ? ????? ????? ????????
***
??????????????? (?????)
?????? (??????? ?????) ?????????
????? ??????? ???????? ( ?????? ??? ?????? ??? ??? ? ) ?
????? ???????? ? ????? ?????????? ? ?????????? ? ????????? ??????? ??? ????????
???????? ? ????? ???? ????????

```
????? ?????? ???????
???????????? (????????) ?
????? ??? ???????? ??????? ? ??????? ????? ??? ??????????
??????? ? ?????? ?
????? ? ????????
? ????? ?? ????? ?
???? ??????????? ???? ????? ???????? ?????? ? ???? ???????????? ?????????
????????
? ??????? ? ??????? ?????
???????? (?????) ?????? ? ???? ???????
???????? ? ??????? ( ?????? ?????? ??????? ????????)
????? ??? ???????? ??????? ? ??????? ????? ??? ????????? ?
(????? ???????? ??????)
???? ????? (???? ??????) ???? ???????? ?
???? ???????? ? ????? ?????? ??? ???????? ?
?????? ??????? ?????? ?
???? ?????? ????????? (???? ???????) ?
????? ??????????
?????? ??????? ?? ??????? ? ?????????
???? ???????????
(????? ????????? ???????)
???????? ? ????? ???? ?
????? ??????? ? ??????? ?? ?????? ?
??????? ???????
```

???????? ??????? ????? ???????
?????? ? ?????? ? ????
?????? ????? ??????
?????????? ..
????? ????? ?????? ?
????? ????? ??????? (???????)
??????? ???????? ????? ???????
?????? ?????
????? ???????? ? ?????
????? ???????
???????? .. (???? ?????)
??????? ??????????
???????? ?? ????? ?
???? ??????
????? ????????? ????????.
??????? ????????
?????????
??????? ????? ? ???????? ?????? ?? ??????
?????? ???????? ?????????
??????? ???????? ??? ??????
????? ???? ??????? ??????? ?? ????????? ? ????? ??????? ? ????? ?? ???????
?????? ??????????
???? ????? ??????? ?? ???????
????? ?? ??????
??????? ?????? ? ??????
????? ? ??????? ? ???????
?????? ??????
???? ??? ????? ??????
?????? ???????
?????? ?????????? ?? ?????? ? ?????
?????????????
????? ????? ????? ? ? ?????????? ? ????????? ????? ?????? ...
?????? ?????? ????????
???????
??????? ? ???? ????????
??????? ??? ????? ??????
????? ???????
???? ???????? ????? ??? ? ????? ??? ???????????? ? ???????? ????????
???? ???? ? ???? ????? ? ???? ???????
?? ???? ????? ??? ???? ??????? ?!
( ?????? ... ? ???????? ??????? )
?????? ? ???? ???????????????? (???????) ? ???? ?????? ??????? ? ??????? ? ???? ?????? ! ?
??????? ? ????? ?????? ???????
?????? ? ??????? ?????????? ?
???????
???????
????? ????? ????? ? ???? ??? ?????? ? ????? ???????
????? MAP ?????? ????? ?????? ??????? ? ??????? ? ?????? ? ?????? ??????? ?
???????? ? ?????? ?????? ?
???? ??????? ??????? ???????? ?????? ?
????? ????? ? ????? ????? ? ???? ????? ?? ????? ??? ??? ??? ?? ???? ??????? ? ????? ??????? ? ??????? ? ????? ?????????
????????
?????????? ??????? ???? ??? ??????
??? ???????? ??? ??????
???? ?????? ?????? ?? ?????
????? ????? ?????? ??? ???????
??????? ? ???????? ? ?????? ? ????? ??????? ?
???????? ?????????
(????????)
?????? ?????????? ?????? ??? ??????
?????? ???????
??????? ????? ? ??????? ???????
????? ??? ????????
???? ????? ???? ???????
????? ????? ???? ???? ?????? ?? ??? ????????
????? ??? ???????? ?? ??????? ?????? (?????? ?????? ? ?????? ? ??????)
???? ?????????
???? ?????
???????? ???????
? ????? ?????? ?????? ????? ???? ???? ???????? ??? ????? ???? ?? ??? ????

David Mytton says

This is a quick history of the key events since the beginning of the universe. The idea of big history is excellent and should be required reading/learning in basic education. I learned some new things, such as the size and importance of the Mongolian Empire and how the Americas were some 3000-4000 years behind the technological development of Eurasia, which helps explain how the Spanish were able to so easily destroy South America's Incas and Aztecs. It also does a good job of putting our human timeline into perspective, for example:

After all, people 30,000 years ago are only 1,200 generations removed from us. At twenty-five years per generation, four generations cover a hundred years, forty generations cover 1,000 years, 400 generations cover 10,000 years, and 1,200 generations cover 30,000.

However, I found the choice of where to focus the detail to be quite odd. For example, the Roman Empire was covered in just a few sentences, certain regions such as Japan had almost no mention and both World Wars were only covered briefly. Of course, this is a generalist book and it's impossible to satisfy everyone but given the importance of the Roman Empire, the global nature of WWI and WWII and the dominance of the Japanese economy in the late 20th century, I would've thought there would be more to say.

As an introduction to the history of the world, setting the stage for more in depth reading in specific areas, I'd say it does a decent job but the final chapter predicting future scenarios feels like it could be so much better. Having read The Lessons of History, Destined for War: Can America and China Escape Thucydides's Trap? and Thinking in Time: The Uses of History for Decision-Makers it's easy to see how much can be learned. With such a huge overview of history, then perhaps this chapter can be updated with more thoughtful analysis along with some of the relevant events now we're a good way into the 21 st century.

## Lynne Pennington says

For those who don't know, "Big History" (the concept) is the history that takes a mega-macro approach to history, starting with the "big bang" and trying to put humanity in perspective in terms of the, well, the longterm. This book is a summary of history including prehistory, from the beginning, and even though I was familiar with the main outlines of certain historical periods, this book helps put the whole span in perspective. Unlike many histories, China and India are included as part of the greater picture, which is as it should be. European history would not be complete without the Mongols, for example. I enjoyed this book, not as a sit-down-and-read from start to finish, but as a bit-at-a-time read before bed.

## ???? ???? says

?? ???????? ????? ??? ???? ????????? ?????? ???? ??? ??? ?????? ??????? ???? ?????? ?? ??? ??????? ??????.
?? 400 ???? ???? ???????? ?? ?????? ?????? ? ?????? ?????? ??? ??? ??? ????? ?????? ? ???????.
?????? ???? ???? ? ??????? ???? ?? ?? ????? ???? ?????? .. ? ?????? ????? ?????? ???? ??? ????????? ??? ???
????? ???????? ??? ????? ??? ???? ???? ? ???? ??

## Mohamed IBrahim says

??????? ??????? ????? ?????? ????? ??? ???????, ??????? ??????? ?????, ???? ??????? ?????? ???????? ?????? ???????? ?? ????? ???? ????? ??? ?? ??? ????? ???? ??? ??? ????? ?? ?????? ??????? ??? ??? ??????? ???????? ?????? ?????? ??????
???? ???? ????? ?????? ??????? ????????? ?????? ??? ????? ??? ???? ?? ?? ??? ?? ????? ????
???????? ???? ????? ????? ??? ????? ???????? ?????? ??? ????
?????? ?????? ????????
"???? ????? ???? ????? ??? ????? ???? ???? ????? ?? ??? ??? ? ??????? ????? ?? ???? ??????"
??? ?? ?????? ?? ?????? ???? ???? ?????? ???????? ?? ???????
??? ??? ?????? ???

## ???? Says

???? ???? ??? ?? ???????? .. ???? ?? ????? ?????? ??????? ?? ????? ?? ?????? ?????? ?? ??? ???? ?????? ?????????? ??????.
??? ????? ????? ( ??????? ???? ?????? ????? ???? ?????? ) .. ??? ??????? ?? $30.000 ~ ? ? ? ~ ? ? ? ~ ? ? ? ? ? ? ?$ ????? ??? ?? ????? ???? ?????? ?????? ????? ?????? ?????? 12.5 ????? ???.
???? ??????? ?? ???? ???? ??????? ????? ???????? ???? ???? ?? ??? ?????? ???????? ????? ??? ?? ?????? ??? ????????.
?? ????? ??????? ??? ????????? ?? ???????? ????????? ??? ????? ???????? ?? ???? ??????? ???????????? ????????? ?? ????? ?????? ?????? ?? ????? ??????? ??? ?????????? ?????? ??????? ???????? ????????? ?????? ??? ?????? ???? ?? ?????? ?????? .. ????? ??????? ????? ?????? ??? ??????? ?????? ?? ????? .. ??????? ??? ?????? ????? ??????? ??????? ?????? ???? ?????? ????? ??????? ??? ????? ?????? ???? ?????? ????? ????? ?????.
??????? ?????????? ???? ???? ????? ??? ??? 10.000 ? ???? ???? ???? ??? ??? ???? ??? ?????? ?? ?????? ?? ???? ?????? ?????? ??????? .. ????? ?????? ??????? ?? ??? ????? ???? ????? ????? ????? ???? ????? ??? ??? ????? ???? ???? ???? ????? ?? ????? ???? ???? ?? ????? . ????? ?? ??????? ???? ??? ??????? ???? ??????? ?????????.
?? ???? ??????? ??? ???? ???? ??????? ??????? ?????? ???? ????? ????? ?? ???????? ??????? ?????

