artificial intelligence(AI)

section1

1) what is AI ?

2) application of AI?

3) foundation of AI?

4) history of AI?

1- **what is AI ?**

intelligence is a mental skill that help us precieve,thinking,predict and manipulate.

Artificial intelligence (AI) is the theory and development of computer systems capable of performing tasks that historically required human intelligence.

Artificial intelligence (AI) :"It is a branch of computer science by which we can create intelligent machines which can behave like a human, think like humans, and able to make decisions.

Artificial Intelligence (AI) refers to the simulation of human intelligence in machines,system.application that are programmed to think and act like humans. It involves the development of algorithms and computer programs that can perform tasks that typically require human intelligence

Application of AI?

- chatbot

- netfliex recommendation

- expert system

- vacuum cleaner

- taxi-driver

- chess

- robotics

we need four approach to design something with AI:

thinking humanly,acting humanly,thinking rationally,acting rationally.

thinking humanly(the cognitive modeling approach):

Thinking humanly, or a cognitive approach is an approach to artificial intelligence (AI) and machine learning that is inspired by the way humans **think** and **learn**. The cognitive approach aims to develop AI systems that can mimic human thought processes and behaviours

b. acting humanly(turning test approach):

Acting humanly, also known as the Turing Test approach, is an approach to artificial intelligence (AI) and machine learning that focuses on creating machines that can simulate human-like behaviour and thought processes to the point where they are indistinguishable from humans.

this approach believe to make a machine that act as human,performed function as human,alan turning ask question "can machines think?" then ask"can machines do what we can do?"

c.thinking rationally(law of thougth approach):

convert any problem into sentence then symbols(x,y) and using logic rules(and,or) to solve it. rationality:do the rigth thing.

d.acting rationally(rational agent approach):

achieve the best expected outcome when there is uncertainty. example: rational action without thinking rationally

3-**what is the foundation of AI?**

philosophy

mathematics

probability

neuroscience

anatomy

computer engineering

4-**what is the history of AI ?**

two scientists warren,walter wanted to know What is the human mind made of so they study anatomy books and know that the human brain is neurons connected in a specific way They brought vacuum tubes and connected them to each other in

a certain way, and this was just a model that they still did not apply,,,,

marvin minsky is the first scientist applied vacuum tubes mode and made the first neural network called(SNARC),,,,, mccarthy held a conference for two months and
gathered all the scientists who interested in making a mind like the human mind in,there are two scientists simon,newell who made a logical theory any problem can be solved with logic,,,, arthur made a program for checkers game,,, minsky made model for each problem and solved it,,,,

a dose of reality: People and governments began to believe in them, and there was a project to translate a book from one language to another, but they failed in it,,,,

knewledge-base system:This is the era, except for artificial ntelligence, because the computer has developed and memory has developed to store more information to work with as a model.