Define the following :

Artificial Intelligence :

* It is the ability of the machines to emulate

the human intelligence and making

computers behave like humans... or do

things that people do better

* Is a branch of computer science that aims

to create machines that perform functions

that require intelligence when performed

by people.

Intelligent Agents :

s a program that can make decisions or perform a service based on its environment, user input and experiences. These programs can be used to autonomously gather information on a regular, programmed schedule or when prompted by the user in real time. Intelligent agents may also be referred to as a bot , which is short for robot .

Artificial Neural Networks :

usually simply called **neural networks** (**NNs**), are computing systems inspired by the [biological neural networks](https://en.wikipedia.org/wiki/Biological_neural_network) that constitute animal [brains](https://en.wikipedia.org/wiki/Brain).

An ANN is based on a collection of connected units or nodes called [artificial neurons](https://en.wikipedia.org/wiki/Artificial_neuron), which loosely model the [neurons](https://en.wikipedia.org/wiki/Neuron) in a biological brain. Each connection, like the [synapses](https://en.wikipedia.org/wiki/Synapse) in a biological brain, can transmit a signal to other neurons. An artificial neuron receives a signal then processes it and can signal neurons connected to it. The "signal" at a connection is a [real number](https://en.wikipedia.org/wiki/Real_number), and the output of each neuron is computed by some non-linear function of the sum of its inputs. The connections are called *edges*. Neurons and edges typically have a [*weight*](https://en.wikipedia.org/wiki/Weighting) that adjusts as learning proceeds. The weight increases or decreases the strength of the signal at a connection. Neurons may have a threshold such that a signal is sent only if the aggregate signal crosses that threshold. Typically, neurons are aggregated into layers. Different layers may perform different transformations on their inputs. Signals travel from the first layer (the input layer), to the last layer (the output layer), possibly after traversing the layers multiple times .

Roboticsِ :

robotics, design, construction, and use of machines (robots) to perform tasks done traditionally by human beings. ... Robots are widely used in such industries as automobile manufacture to perform simple repetitive tasks, and in industries where work must be performed in environments hazardous to humans