# Instant Ai course: 1st session tasks

## Task 1:

However, there are other types of AI that do not rely on Data. Some examples include:

- Expert systems: These are computer programs that mimic the decision-making abilities of a human expert in a particular field. They use a set of pre-programmed rules and a knowledge base to make decisions or provide recommendations.
- Evolutionary algorithms: These are a family of algorithms that mimic the process of natural evolution, such as genetic algorithms and particle swarm optimization. They are used to find solutions to optimization problems, such as finding the best configuration of a complex system.
- Fuzzy logic: This is a form of AI that deals with uncertain or vague information, such as natural language. It uses a set of mathematical methods to handle uncertain or incomplete information in a way that mimics human reasoning.
- Planning and scheduling: These are techniques that allow computers to plan and schedule tasks, by breaking them down into smaller sub-tasks, and then figuring out the best order to accomplish them.
- Robotics: Robots are machines that can perform tasks autonomously or semi-autonomously, by following pre-programmed instructions or by responding to sensor inputs. They can use AI techniques such as computer vision, natural language processing and planning to perform their tasks.

## Task 2:

## Companies in Egypt that use Ai:

1. SkillDNA
SkillDNA Helps you to find out all related skills needed for a certain job.

2. Agora for Educational Development
Agora is mobile application that connects education to the real world

3. WellHiring
AI software company aims to raise the hiring quality and saving time & cost

4. Partum Electronics
We manufacture voice controlled smart home devices.

5. Webville
Artville is an AI studio that automates photo-editing

# Task 3:

## Interpreted vs compiled programming languages:

A compiled language is a programming language that is converted into machine code so that the processor can execute it. The compiled languages are usually compiled, not interpreted. For better understanding you can go through the types of compiled language – CLEO, COBOL, C, C++, C#, etc.

An interpreted language is also a programming language that is commonly interpreted. In this, the implementations perform instructions directly and easily, without compiling a program into machine-language instructions. For better understanding, you can go through the types of the interpreted languages: Python, BASIC, JavaScript, Perl, etc.

# Task 4:

## Opensource Software vs Closed source:

With **closed source software** (also known as proprietary software), the public is not given access to the source code, so they can't see or modify it in any way.

But with **open source software**, the source code is publicly available to anyone who wants it, and programmers can read or change that code if they desire. Keep in mind that you don't have to read or modify any code in order to use an open source product.

# Task 5:

## What is R Language:

R is a language and environment for statistical computing and graphics. It is a GNU project which is similar to the S language and environment which was developed at Bell Laboratories (formerly AT&T, now Lucent Technologies) by John Chambers and colleagues. R can be considered as a different implementation of S. There are some important differences, but much code written for S runs unaltered under R.

R provides a wide variety of statistical (linear and nonlinear modelling, classical statistical tests, time-series analysis, classification, clustering, …) and graphical techniques, and is highly

extensible. The S language is often the vehicle of choice for research in statistical methodology, and R provides an Open Source route to participation in that activity.

## Task 6:

### What are Languages that do not support oop?

- C
- Basic
- Assembly
- Fortran
- Forth
- Pascal