**AI Diploma Tasks**

Student Name : Ahmed Ashraf Ali Sayed

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**Task 1:** there are much statisticsal tests like mean

**Task 2:** The NFT mean a non-fungible token and it is a non interchangeable unit of data stored on a blockchain it is unique ,a form of digital ledger, that can be sold and traded may be associated with digital files such as photos, videos, and audio**.**

**Task 3**: it is divided into two groups numerical or categorical

1. Numerical data: These data have meaning as a measurement, such as a person’s height, weight, IQ, or blood pressure and there are two types of discrete and continuous.
2. Categorical data: Categorical data represent characteristics such as a person’s gender, marital status, hometown

**Task 4:** one of the ways is to convert the variables into its log to convert the data to normal distrubsion.

**Task 5:** Probability is the heart of AI.In simple terms its a data source and provides various kinds of data to use in AI applications, so that we can draw samples from distributions ( like Normal, Poisson, Bernoulli, Binomial) We can generate distributions by using functions and probability concepts

**Task 6:** websites for data (**kaggle, google datasets engine, data.world, Socrata and Fivethirtyeight**)

**Task 7:** the pretictive analtyicis is group of techniqes used to develop models that used for prediceting and it is depened on multi varibles analysis

**Task 8:** a hypothesis used to make a decision and its can defined as an idea that can be tested, When a predeter-mined number of subjects in a hypothesis test prove the "alternative hypothesis," then the original hypothesis (the "null hypothesis") is overturned or "rejected."And it used in Peppermint Essential oil and vitamin C.

**Task 9:** design pattern it is a description or template for how to solve a problem that can be used in many different situations and s the re-usable form of a solution to a design problem. It is divided into three main catigores(creatinal, Structural, Behavior Design pattern)

1. **Creatinal Design pattern**
2. Singleton
3. Factory
4. Abstract Factory
5. Builder
6. Prototype
7. **Structral design pattern**
8. Proxy
9. Decorator
10. Adaptor
11. **Behavior design pattern**
12. Template
13. Observer
14. Command