**(1) What is the data science?**

the data science is nothing but manupulation of the data in such a way that can be used in anyway.

Pandas is stand for panal data, that is derived from an

Animal rhino.

Pandas is created in 2015 american busness man and

Developer wes mckenny.

(2)**machine learning?**

**Supervides learning**  in this method of machine learning the indivisual teacher is present tech a machine about real world object and things.

Ex : fingerprint,facelock;

**Unsupervised learning :)** there is no teacher to tech a machine the machine itself devide the objects in cluster (similer type of objects)

Ex : voiced based assistance.

**Reinforcement learning : )**  there is only two main

Agent that is machine and environment there leaves agent learn behave of the current environment to follow some policy.

Ex : self driving car

**Linear Regration : )**

**The linear regration**  is nothing but the relationship between the two variable.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| X | Y | X-X- | Y-Y- | (X-X-)2 |
| 1 | 2 | -3.5 | .5 | (3.5)2 |
| 2 | 5 |  |  |  |
| 3 | 3 |  |  |  |
| 4 | 2 |  |  |  |

M=4.5 m=2.5

M = (x-x-)(y-y-) / (x-x-)2

**Calculation of R2 :**

**(fitness of good)**

**R2 = (yp –y-)2  / (y-y-)2**