Ai hw\_2

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# **Q1 How would you define Machine Learning?**

Machine Learning is when a computer program capable of learning from data by itself.

# **Q2 Can you name four types of problems where it shines?**

* Complex Problems that we have no solution
* Fluctuating Environment: capable of adapting to new data
* When coding a solution that takes a lot of programming and time where ML save time and effort and give better performance
* Getting insights about large amount of data

# **Q3 What is a labeled training set?**

is a training set that are labeled and identified for every single instance.

# **Q4 What are the two most common supervised tasks?**

* **Regression:** predict a value
* **Classification:** classify items and separate them

# **Q8 Would you frame the problem of spam detection as a supervised learning problem or an unsupervised learning problem?**

Spam Detection is a supervised learning problem because here we use classification to label emails either as spam or not spam.