Machin Learning

- Introduction
- Types

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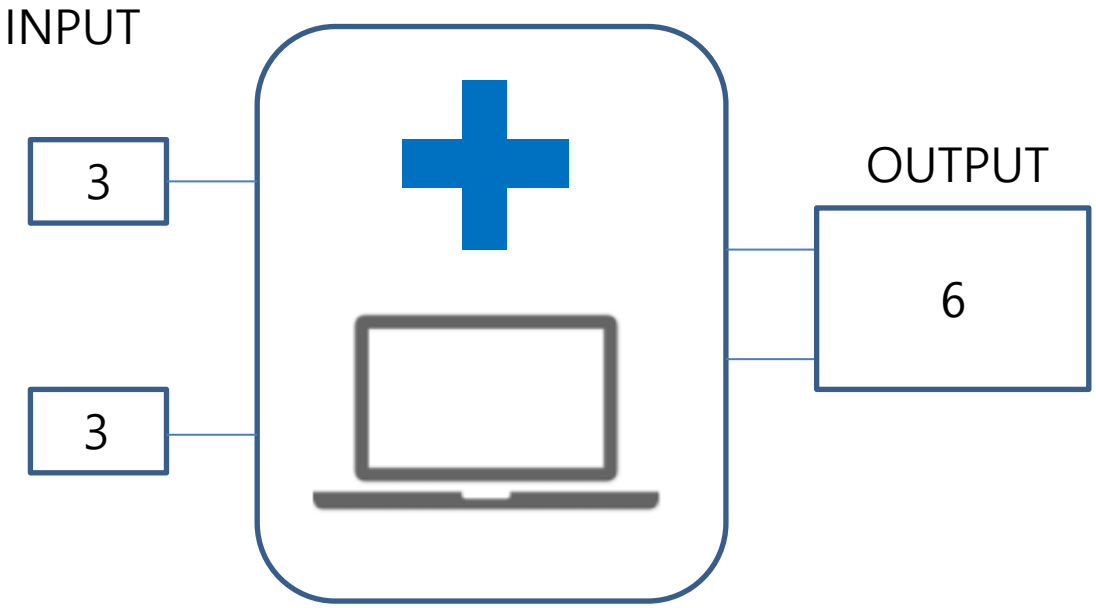
1. INTRODUCTION

01. Introduction

WHY?

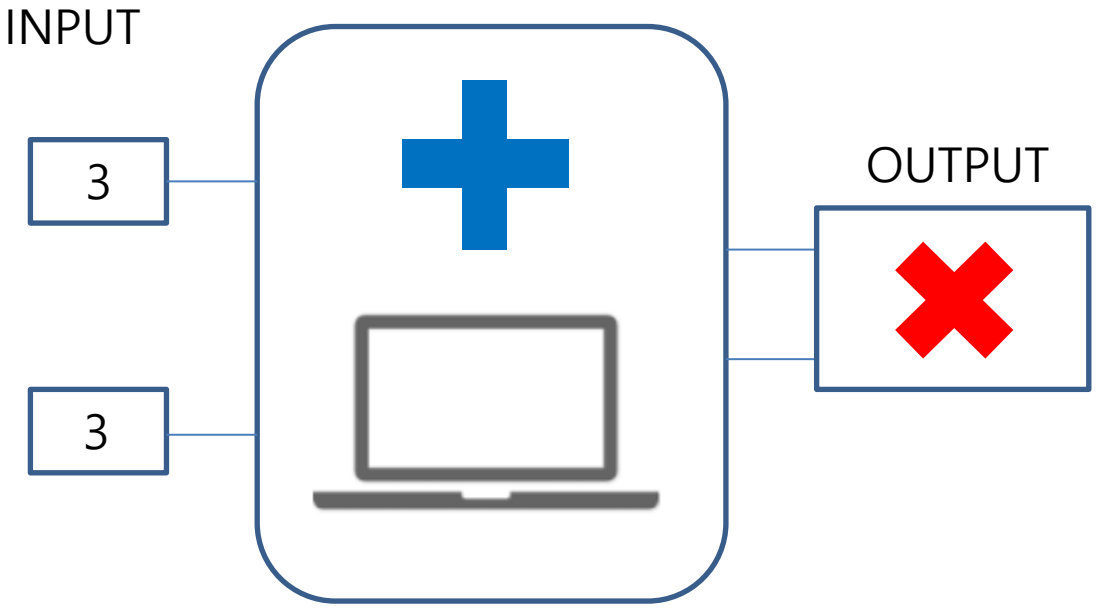
- **If can you want an answer 3 + 3, can you get it? YES**



01. Introduction

WHY?

- **If can you want an answer 3 x 3, can you get it? NO**

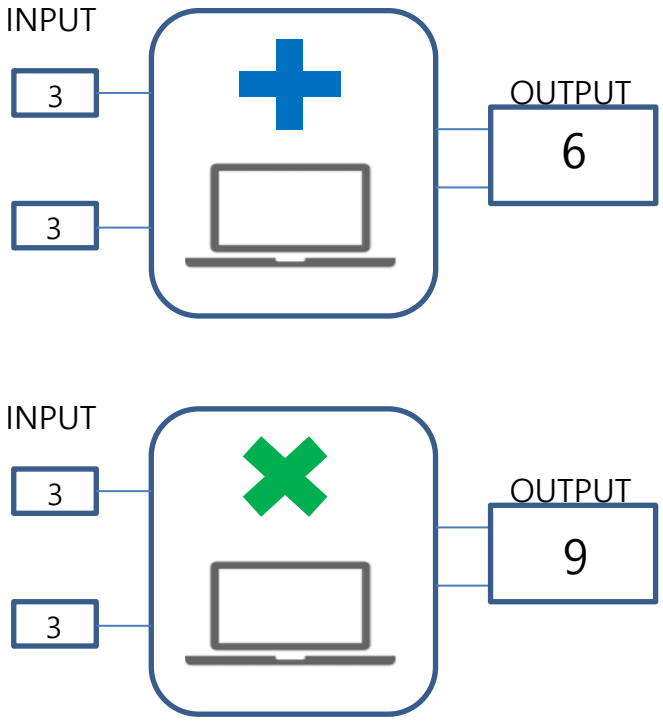


01. Introduction

WHY?

- **[1] If so?**

  Need to separate program / logic



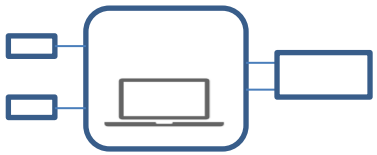
01. Introduction

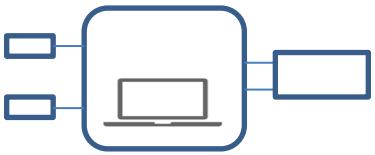
WHY?

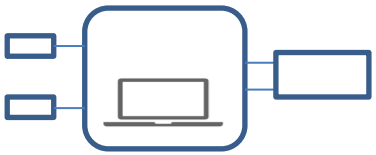
- [2] If so?

```
1 + 1 = 11          1 + 1 = 10          1 + 1 = 3
 2 + 2 = 22          2 + 2 = 20          2 + 2 = 5
 3 + 3 = ?           3 + 3 = ??          3 + 3 = ???
```

- <Traditional Programming>







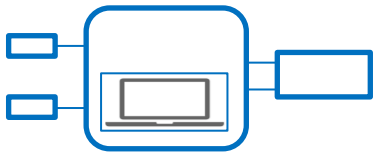
01. Introduction

WHY?

- **[2] If so?**

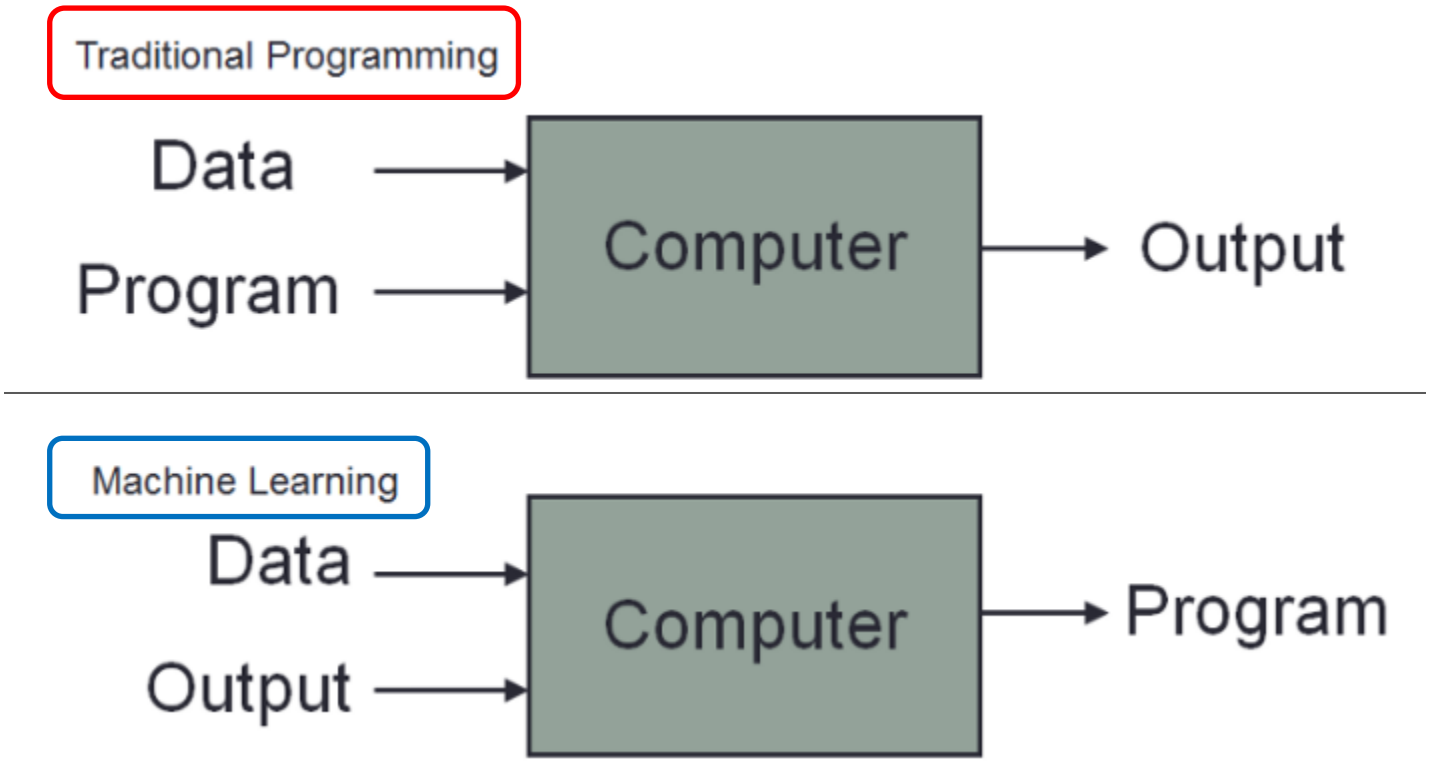
```
1 + 1 = 11        1 + 1 = 10        1 + 1 = 3
 2 + 2 = 22        2 + 2 = 20        2 + 2 = 5
 3 + 3 = ?         3 + 3 = ??        3 + 3 = ???
```

- **<Machine Learning>**



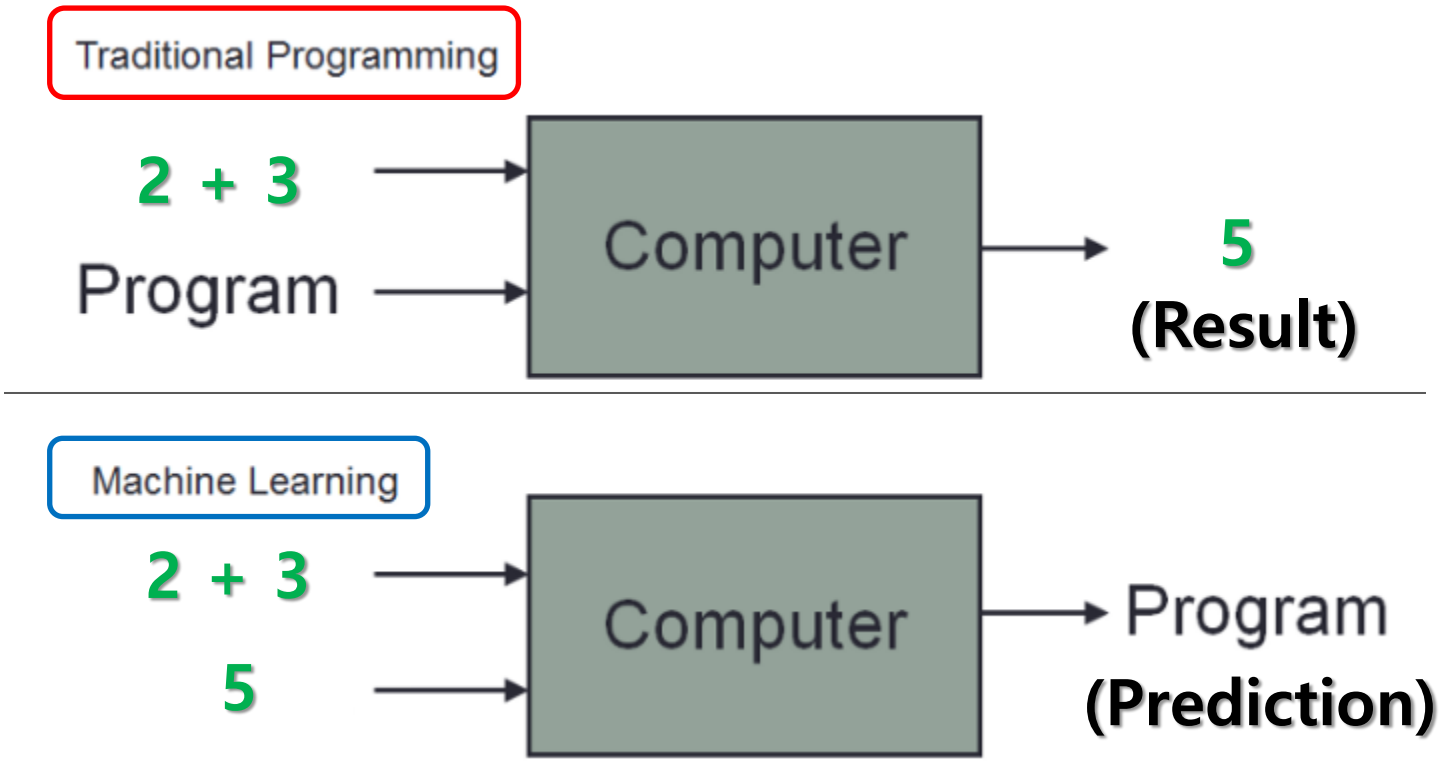
01. Introduction

HOW?



01. Introduction

HOW?



Machine learning

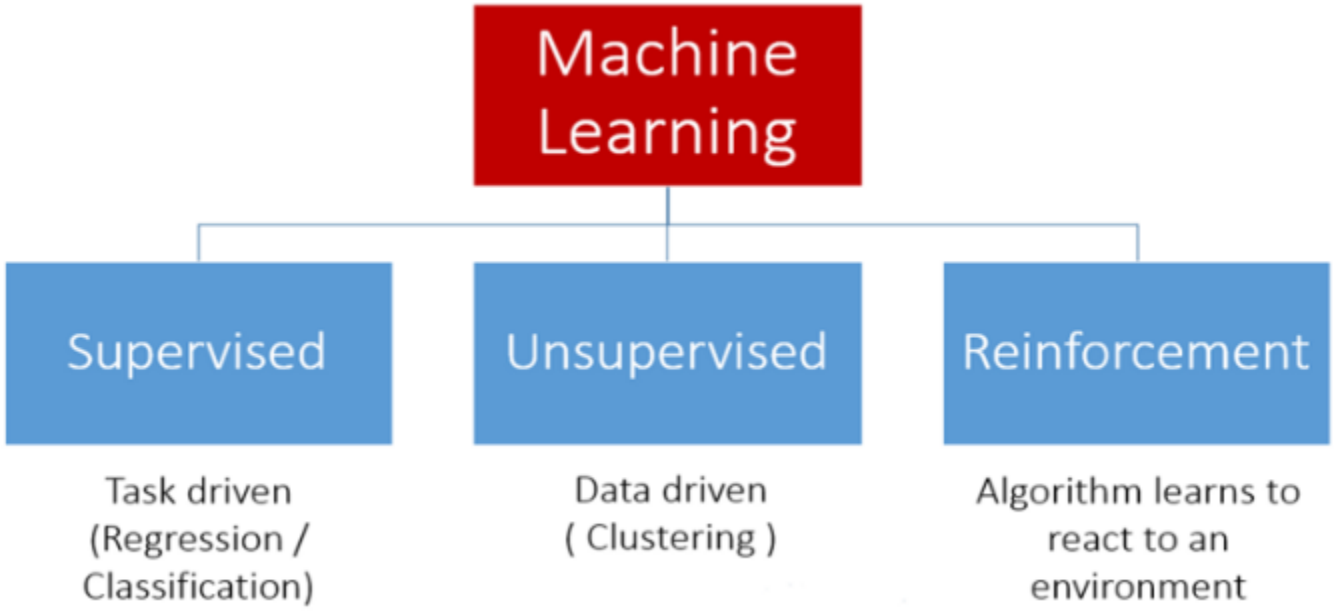
- 1. Learning from data

- 2. building the logic

- 3. prediction the output

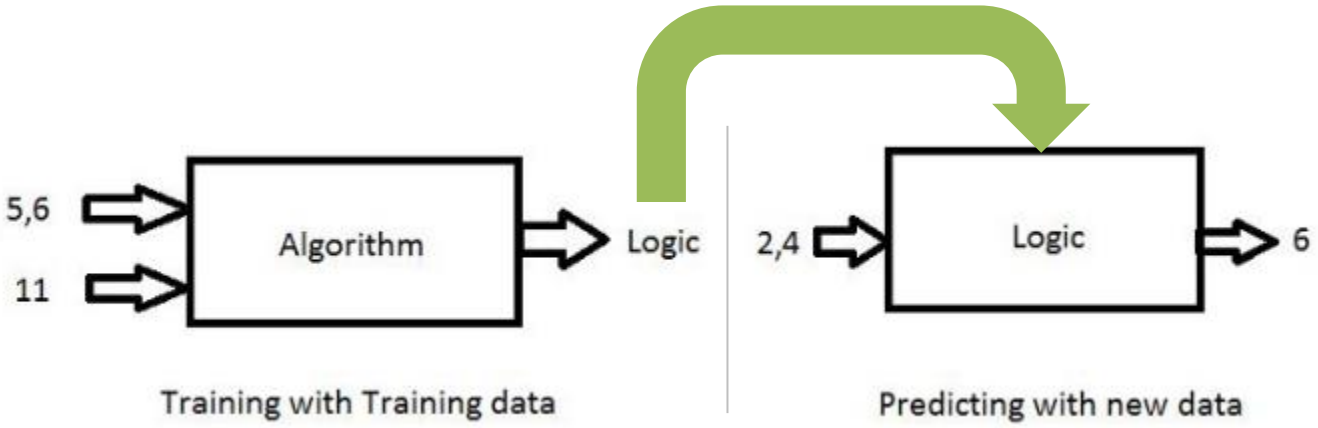
2. TYPE

02. Type


Machine Learning
Supervised
Unsupervised
Reinforcement
Task driven (Regression / Classification)
Data driven (Clustering)
Algorithm learns to react to an environment

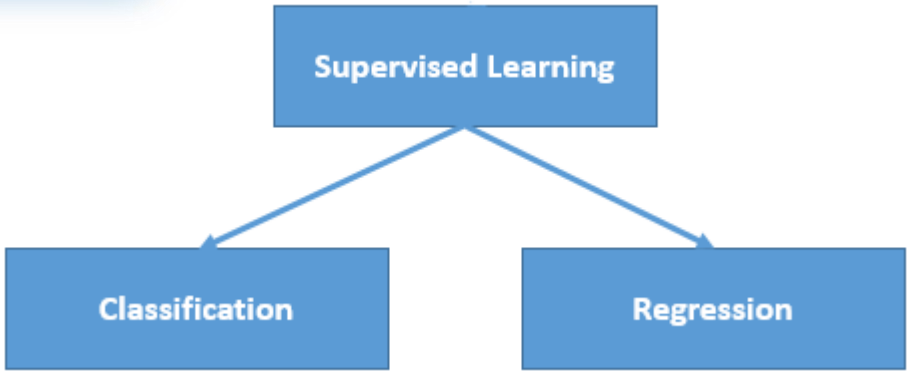
02. Type

Supervised

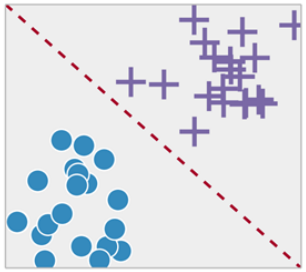


02. Type

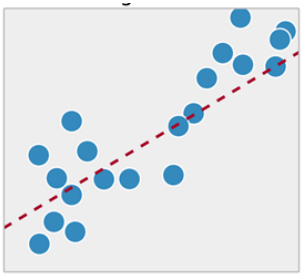
Supervised



Categorical -response



Continuous -response

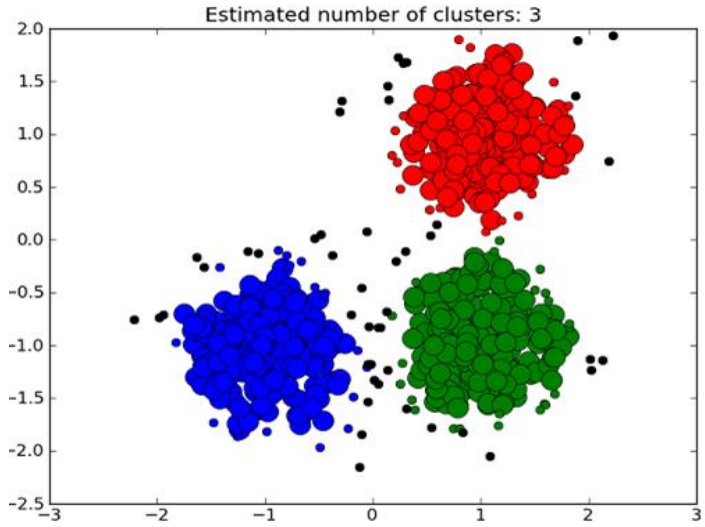


02. Type

Unsupervised

- Don’t provide the lables

- Clustering



- Bit difficult to implement and its not used as widely as supervised.

02. Type

Reinforcement

- Algorithm Learns to react to an environment
- Reward
- Powerful and complex to apply for problems

Q & A