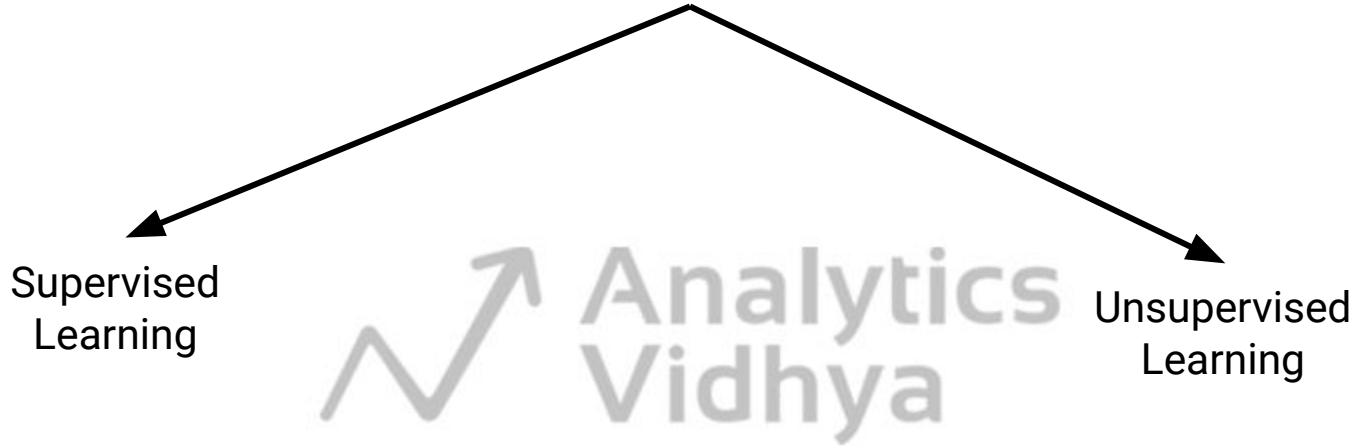


The logo for Analytics Vidhya, featuring a stylized line graph with an upward-pointing arrow and the text "Analytics Vidhya" in a sans-serif font.

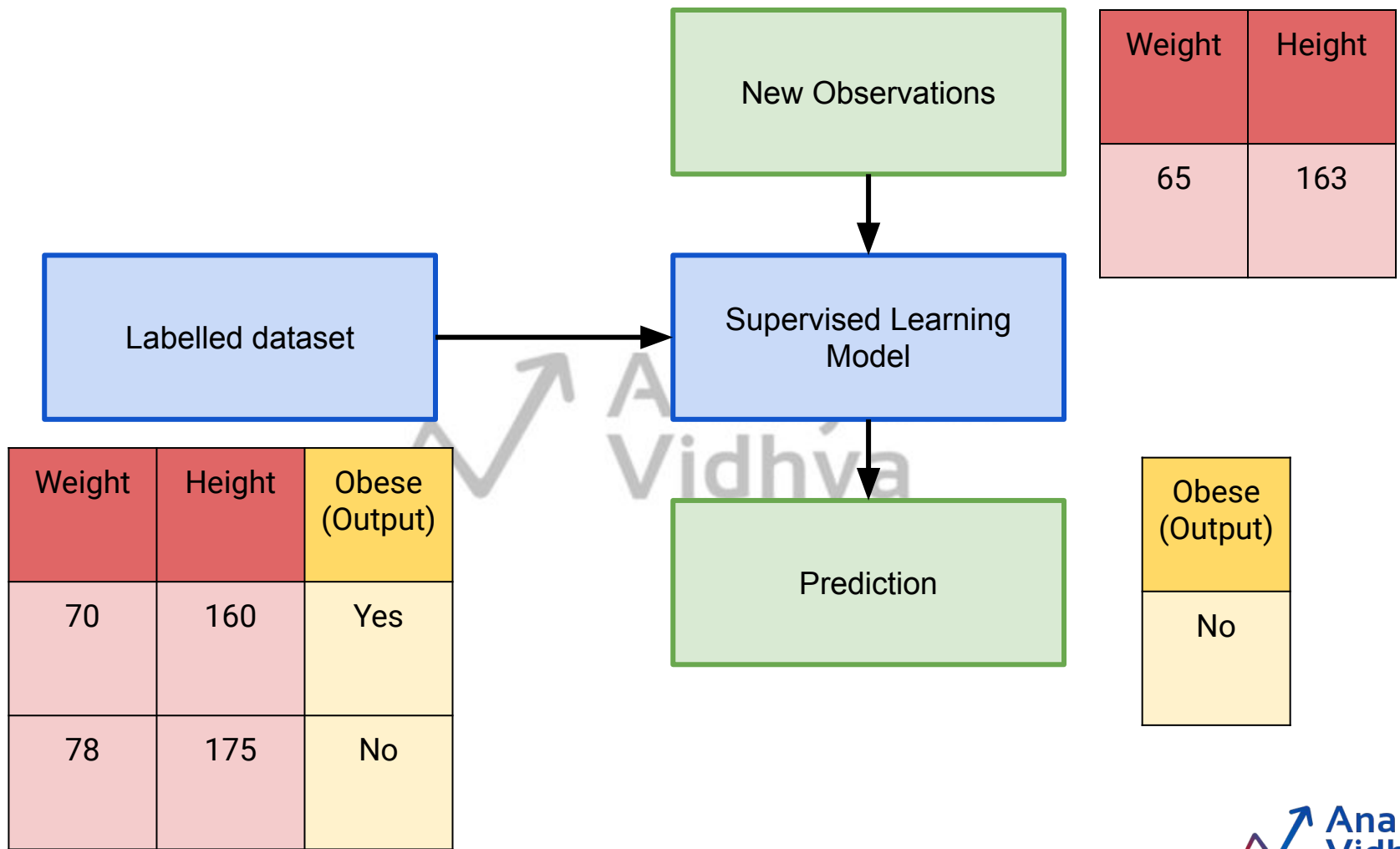
# Types of Machine Learning Problems

# Machine Learning Problems



# Supervised Machine Learning

The computer is taught by example.



# Supervised Machine Learning



```
graph TD; A[Supervised Machine Learning] --> B[Regression problem]; A --> C[Classification problem]; B --> D[Problems where the output variable is continuous in nature like weight, height, salary, price, etc.  
Ex: Stock price prediction, Weather forecasting, etc.]; C --> E[Problems where the output variable belongs to one of the given categories like yes, no, pass, fail, etc.  
Ex: Email spam filter, Image tagging, etc.]
```

## Regression problem

Problems where the output variable is continuous in nature like weight, height, salary, price, etc.

Ex: Stock price prediction, Weather forecasting, etc.

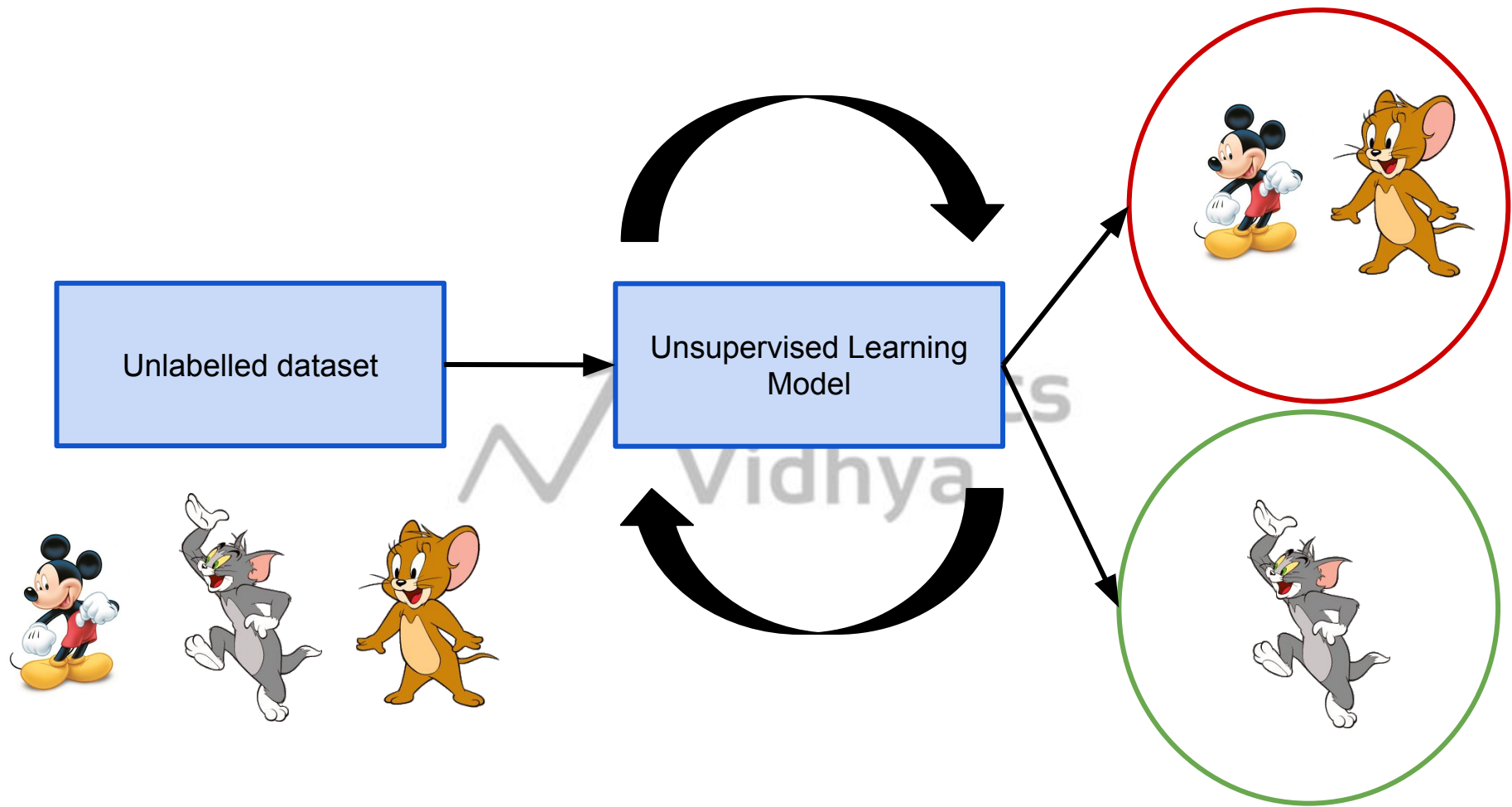
## Classification problem

Problems where the output variable belongs to one of the given categories like yes, no, pass, fail, etc.

Ex: Email spam filter, Image tagging, etc.

# Unsupervised Machine Learning

The computer is expected to learn by itself.



# Unsupervised Machine Learning



## Clustering

Involves organizing unlabelled data into similar groups of data.

Ex: Customer segmentation





Thank You!!