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|  | **ASSIGNMENT 1** | SESSION-2022-23 |
| SEM-5TH (ODD) |

# NOIDA INSTITUTE OF ENGINEERING & TECHNOLOGY, Greater Noida

# Semester ODD

# Department of Data Science

# UNIT I

# ASSIGNMENT I

### **Subject Name: Machine Learning Subject Code ACSML0401 Name of Course Coordinator: Sofia K. Pillai/Aradhana Saini Class: DS V SEM A/B/C**

### **Submission Date: 29/08/2022**

1. Define Machine Learning. Discuss with example some useful application of Machine Learning. [CO1]

### Differentiate between Supervised, Unsupervised and Reinforcement Learning. [CO1]

1. What do you mean by a well-posed learning problem [CO1]

### Describe in detail all the steps involved in designing a learning system. [CO1]

1. What do you mean by general-to-specific ordering of hypothesis? [CO1]

### Explain the following: [CO1]

### (a) Concept Learning

### (b) Consistent Hypothesis

### (c)Version Space

### (d)General Boundary

### (e)Specific Hypothesis

1. Describe Find S algorithm. What are the properties and complaints of Find – S? [CO1]
2. Perform Find S algorithm on the given dataset: [CO1]

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| Time | Weather | Temperature | Company | Humidity | Wind | Go |
| Morning | Sunny | Warm | Yes | Mild | Strong | Yes |
| Evening | Rainy | Cold | No | Mild | Normal | No |
| Morning | Sunny | Moderate | Yes | Normal | Normal | Yes |
| Evening | Sunny | Cold | Yes | High | Strong | Yes |

### What are the issues in Machine Learning? [CO1]

### Write the difference between Supervised and Unsupervised Learning. [CO1]