

**SIR SYED UNIVERSITY OF ENGINEERING & TECHNOLOGY
SOFTWARE ENGINEERING DEPARTMENT**

Spring 2021

**Object Oriented Programming (SWE-103T)
Assignment # 1**

Semester: II
Due Date: 28-March-2021

Batch: 2020F
Max Points: 10

Instructions:

- Attempt all questions
- Assignment should type
- Assignment should be uploaded in pdf format

Question 1

[4 points]

What are the different numerical data types used in JAVA programming? Make a chart which shows the range and storage size of each type.

Question 2

[3 points]

How numbers can be read from keyboard in JAVA? What are the methods used for reading numerical input for each data type? Give the answer with proper examples.

Question 3

[3 points]

Write a program that simulates a vending machine. The machine holds six items numbered 1 through 6, with prices \$1.25, \$.75, \$.90, \$.75, \$1.50, and \$.75, respectively. The input to your program is an integer and a floating-point number representing an item number and a sum of money. If the money is enough to buy the item, your program should print:

"Thank you for buying item X. Your change is Y."

If the money inserted is insufficient, then your program should say so. The following display gives typical output:

**Enter an item number and a sum of money: 3 1.00
Thank you for buying item 3. Your change is \$.10**

**Enter an item number and a sum of money: 6 0.25
Please insert another \$.50**