SLIIT UNI
THE KNOWLEDGE UNIVERSITY

Faculty of Computing

Year 1 Semester 1 (2024)

IT1120 – Introduction to Programming Lab Sheet 03

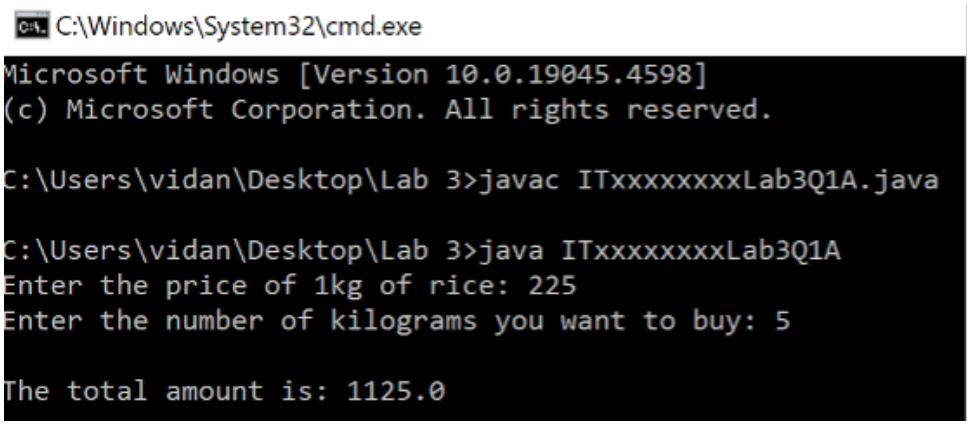
Question 1A (Tutorial 2 – Q2)

Enter the price of 1kg of rice and the number of kilograms you want to buy from the keyboard. Write a Java program to find the amount you have to pay.

Save the file inside '**Lab 3**' folder as: **ITxxxxxxxxLab3Q1A.java**

Replace 'ITxx xxx xxx' of the filename, with your own Student ID.

Expected Output:



Question 1B (Tutorial 2 – Q2)

The supermarket is giving a 10% discount on the total bill.

Modify the Java program and find the amount you have to pay after considering the discount.

Save the file inside '**Lab 3**' folder as: **ITxxxxxxxxLab3Q1B.java**

Replace 'ITxx xxx xxx' of the filename, with your own Student ID.

Expected Output:

```
Microsoft Windows [Version 10.0.19045.4598]
(c) Microsoft Corporation. All rights reserved.

C:\Users\vidan\Desktop\Lab 3>javac ITxxxxxxxxLab3Q1B.java

C:\Users\vidan\Desktop\Lab 3>java ITxxxxxxxxLab3Q1B
Enter the price of 1kg of rice: 225
Enter the number of kilograms you want to buy: 5

The total amount with 10% discount is: 1012.5
```

Question 2 (Tutorial 2 – Q3)

An employee is paid an additional amount to his monthly salary as OT amount.

Write a Java program to input the monthly salary, number of OT hours and OT hourly rate from the keyboard to find the total salary.

$$OT\ Amount = OT\ hours\ *\ OT\ Hourly\ Rate$$
$$Total\ Salary = Monthly\ Salary + OT\ Amount$$

Save the file inside '**Lab 3**' folder as: **ITxxxxxxxxLab3Q2.java**

Replace 'ITxx xxx xxx' of the filename, with your own Student ID.

Expected Output:

```
Microsoft Windows [Version 10.0.19045.4598]
(c) Microsoft Corporation. All rights reserved.

C:\Users\vidan\Desktop\Lab 3>javac ITxxxxxxxxLab3Q2.java

C:\Users\vidan\Desktop\Lab 3>java ITxxxxxxxxLab3Q2
Enter the monthly salary: 50000
Enter the number of OT hours: 5
Enter the OT hourly rate: 1000

The total salary including OT is: 55000.0
```

Question 3 (Tutorial 2 – Q4

Write a Java program to enter a rupee amount and print the number of 5000/=, 1000/=, 500/=, 200/=, 100/=, 50/=, 20/=, 10/=, 5/=, 2/=, 1/= notes and coins in that amount.

e.g. Amount = 2754

Your program should print

5000 Notes – 0

1000 Notes – 2

500 Notes – 1

200 Notes – 1

100 Notes – 0

50 Notes – 1

20 Notes – 0

10 Notes – 0

05 Notes – 0

02 Notes – 2

01 Notes – 0

Save the file inside '**Lab 3**' folder as: **ITxxxxxxxxLab3Q3.java**

Replace 'ITxx xxx xxx' of the filename, with your own Student ID.

Expected Output:

```
Microsoft Windows [Version 10.0.19045.4598]
(c) Microsoft Corporation. All rights reserved.

C:\Users\vidan\Desktop\Lab 3>javac ITxxxxxxxxLab3Q3.java

C:\Users\vidan\Desktop\Lab 3>java ITxxxxxxxxLab3Q3
Enter the Rupee amount: 2754

5000 Notes - 0
1000 Notes - 2
500 Notes - 1
200 Notes - 1
100 Notes - 0
50 Notes - 1
20 Notes - 0
10 Coins - 0
05 Coins - 0
02 Coins - 2
01 Coins - 0
```

Question 4

Write a Java program that inputs a five digit number, separates the number into its individual digits and prints the digits separated from one another by a space.

e.g: Input → 52348

Outout → 5 2 3 4 8

Save the file inside '**Lab 3**' folder as: **ITxxxxxxxxLab3Q4.java**

Replace 'ITxx xxx xxx' of the filename, with your own Student ID.

Expected Output:

```
Microsoft Windows [Version 10.0.19045.4598]
(c) Microsoft Corporation. All rights reserved.

C:\Users\vidan\Desktop\Lab 3>javac ITxxxxxxxxLab3Q4.java

C:\Users\vidan\Desktop\Lab 3>java ITxxxxxxxxLab3Q4
Enter a five-digit number: 52348

5 2 3 4 8
```