**King Saud University**

**College of Computer and Information Systems, Department of Computer Science**

**CSC 111: Java Programming-I, Semester I - 2013**

**Lab #7**

**[Exercise 1]**

Write a java program that prints the following menu:

1- Print my Name.

2- Print my Student ID.

3- Print my Department name.

Then, reads an integer, which represent the user’s choice from the menu. Finally, prints the answer to the user. Make sure that you print an appropriate error message if the user typed anything other than 1, 2 or 3.

**Example:**

Choose from the menu:-

1- Print my Name.

2- Print my Student ID.

3- Print my Department name.

=============================

Answer: 2

My Student ID is 4330000000

**[Exercise 2]**

|  |
| --- |
| **Rectangle** |
| + widthKM : double  + lengthKM : double  + widthM : double  + lengthM : double |
|  |

Write a java program that reads the width and length of a rectangle in kilometers. The program should use the Rectangle class.

After that, the program should print the following menu:

1- Rectangle's Area in Square kilometer

2- Rectangle's Perimeter in kilometer

3- Rectangle's Area in Square Miles

4- Rectangle's Perimeter in Miles

Read the user’s choice, and print the results.

**Example:**

Enter the Rectangle's width in kilometer:

10

Enter the Rectangle's length in kilometer:

20

Choose from the menu:-

1- Rectangle's Area in Square kilometer

2- Rectangle's Perimeter in kilometer

3- Rectangle's Area in Square Miles

4- Rectangle's Perimeter in Miles

=============================

Answer: 3

Rectangle Area in Square Miles = 77.2203839282

**[Homework]**

Write a java program for a restaurant. The program shows the menu to the user. Reads the user choice, then show the next menu. Here is how the menu look:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **First Question** | **Second Question** | | **Third Question** | |
| **Name** | **Price** | **Name** | **Price** |
| What would you like? | What type? | | What would you like to drink? | |
| 1- Burger | 1- Beef  2- Chicken  3- Fish | 17 SR.  15 SR.  16 SR. | 1- Cola  2- 7up  3- Water | 2 SR.  2 SR.  1 SR. |
| 2- Shawarma | 1- Small  2- Large  3- Arabian | 3 SR.  7 SR.  10 SR. |
| 3- Pizza | 1- Margarita  2- Pepperoni  3- Vegetarian | 20 SR.  24 SR.  22 SR. |

When the user answers the 3 questions, print his order and total price. Make sure that you print an error message when the user types an incorrect number.

**[Examples]**

|  |  |
| --- | --- |
| \*\* Welcome to CSC111 restaurant \*\*  What would you like?  1- Burger  2- Shawarma  3- Pizza  ================  Answer: 1  ================  What type?  1- Beef [17 SR.]  2- Chicken [15 SR.]  3- Fish [16 SR.]  ================  Answer: 1  ================  What would you like to drink?  1- Cola [2 SR.]  2- 7up [2 SR.]  3- Water [1 SR.]  ================  Answer: 1  ================  Your order is: Beef Burger with Cola.  Your Total is: 19 SR. | \*\* Welcome to CSC111 restaurant \*\*  What would you like?  1- Burger  2- Shawarma  3- Pizza  ================  Answer: 3  ================  What type?  1- Margarita [20 SR.]  2- Pepperoni [24 SR.]  3- Vegetarian [22 SR.]  ================  Answer: 2  ================  What would you like to drink?  1- Cola [2 SR.]  2- 7up [2 SR.]  3- Water [1 SR.]  ================  Answer: 2  ================  Your order is: Pepperoni Pizza with 7up.  Your Total is: 26 SR. |
| What would you like?  1- Burger  2- Shawarma  3- Pizza  ================  Answer: 4  ================  ERROR: bad input. | |