

## **Control Structures-**

### **Print Customer Details**

Help Mr.Ben who is a programmer, in developing a registration form on console. Customers will not just input data, but also view the details once he/she finishes the registration.

#### **Sample Input 1:**

Enter your name:Jany

Enter age:25

Enter gender:Female

Hailing from:Mexico

#### **Sample Output 1:**

Welcome, Jany

Age:25

Gender:Female

City:Mexico

### Finding Range Of The Number

Write a java program to find the range of the entered value.

a)If the entered value is greater than 0 and less than or equal to 100 then display "Range of the number <number> is 0 to 100"

b)If the entered value is greater than 100 and less than or equal to 200 then display "Range of the number <number> is 100 to 200"

c)If the entered value is greater than 200 and less than or equal to 500 then display "Range of the number <number> is 200 to 500"

If the given number is not in the above list then display "Entered number <number> is not in the expected range".

#### **Sample Input 1:**

Enter the number

20

#### **Sample Output 1:**

Range of the number 20 is 0 to 100

#### **Sample Input 2:**

Enter the number

180

#### **Sample Output 2:**

Range of the number 180 is 100 to 200

#### **Sample Input 3:**

Enter the number

320

#### **Sample Output 3:**

Range of the number 320 is 200 to 500

**Sample Input 4:**

Enter the number

650

**Sample Output 4:**

Entered number 650 is not in the expected range

### **Road Signaling**

Write a java program to demonstrate the road signaling with default as 'prepare to go' operation.

Assume red for 'stop', green for 'go', and yellow for 'proceed with caution'.

#### **Sample Input 1:**

Enter the color

green

#### **Sample Output 1:**

go

#### **Sample Input 2:**

Enter the color

red

#### **Sample Output 2:**

stop

#### **Sample Input 3:**

Enter the color

yellow

#### **Sample Output 3:**

proceed with caution

#### **Sample Input 4:**

Enter the color

white

#### **Sample Output 4:**

prepare to go

### **Electricity bill calculation**

Write a java program to calculate the EB-Bill based on the usage

- a) No charge, if usage is less than or equal to 20 units.
- b) Rs.3.50 per unit, if usage is greater than 20 units and less than 100 units.
- c) Rs.5.00 per unit, if usage is greater than or equal to 100 units.

#### **Sample Input 1:**

Enter the units consumed

19

#### **Sample Output 1:**

No Charge

#### **Sample Input 2:**

Enter the units consumed

200

#### **Sample Output 2:**

You have to pay Rs.1000.0

### Checking budget of mobile

Write a java program to find the mobile chosen is within the budget or not. To find the budget mobiles is based on the below-mentioned criteria,

a)If the cost of the mobile chosen is less than or equal to 13000 then display it as "Mobile chosen is within the budget"

b)If the cost of the mobile chosen is greater than 13000 then display it as "Mobile chosen is beyond the budget"

#### **Sample Input 1:**

Enter the cost of the mobile

12000

#### **Sample Output 1:**

Mobile chosen is within the budget

#### **Sample Input 2:**

Enter the cost of the mobile

22000

#### **Sample Output 2:**

Mobile chosen is beyond the budget

Finding even number

Write a java program to find the entered number is even. If the entered number is even print "<number> is an even number".

#### **Sample Input 1:**

Enter the number

12

#### **Sample Output 1:**

12 is an even number





## Registration Details

Steeve is currently working in a job portal. His mode of work is, store the registration details like name, qualification, age, phone number, email id and no of years of experience if any of a job seeker. The system will register all the details given and save it in the portal. Implement the scenario and display the output as shown in the sample.

### **Sample Input 1:**

```
Enter your name:Steeve
Enter your age:24
Enter your phoneno:9876542100
Enter your qualification:MBA
Enter your email id[Please provide valid id, after registering your registration id
will be
mailed]:Steeve@gmail.com
Enter your noofexperience[if any]:1.5
```

### **Sample Output 1:**

Dear Steeve, Thanks for registering in our portal, registration id will be mailed to Steeve@gmail.com within 2 working days

### **Sample Input 2:**

```
Enter your name:Steeven Smith
Enter your age:24
Enter your phoneno:9876542100
Enter your qualification:MBA
Enter your email id[Please provide valid id, after registering your registration id
will be
mailed]:Steevensmith@gmail.com
Enter your noofexperience[if any]:1.5
```

### **Sample Output 2:**

Dear Steeven Smith, Thanks for registering in our portal, registration id will be mailed to Steevensmith@gmail.com within 2 working days

### Celcius to Farenheit Conversion

Write a program to convert Celsius to Fahrenheit. Display the result correct to 1 decimal.

Create a class "CelsiusConversion.java" and write the main method.

Hint :  $5 * (F - 32) = 9 * C$ , F-Fahrenheit , C- Celsius

**Sample Input 1 :**

80

**Sample Output 1 :**

176.0

**Sample Input 2 :**

88

**Sample Output 2 :**

190.4

### Display Characters

Rohan wants a magic board, which displays a character for a corresponding number for his science exhibition. Help him to develop such application.

For example when the digits 65,66,67,68 are entered, the alphabet ABCD are to be displayed.

[Assume the number of inputs should be always 4 ]

**Sample Input 1:**

Enter the digits:

65

66

67

68

**Sample Output 1:**

65-A

66-B

67-C

68-D

**Sample Input 2:**

Enter the digits:

115

116

101

112

**Sample Output 2:**

115-s

116-t

101-e

112-p

Bill Generation

Tom went to a movie with his friends in a multiplex theatre and during break time he bought pizzas, puffs and cool drinks. Consider the following prices :

- Rs.100/pizza
- Rs.20/puffs
- Rs.10/cooldrink

Generate a bill for What Tom has bought.

**Sample Input 1:**

Enter the no of pizzas bought:10

Enter the no of puffs bought:12

Enter the no of cool drinks bought:5

**Sample Output 1:**

Bill Details

No of pizzas:10

No of puffs:12

No of cooldrinks:5

Total price=1290

ENJOY THE SHOW!!!

### Find Season

Reaya's teacher has asked her to prepare well for the lesson on seasons. When her teacher tells a month, she needs to say the season corresponding to that month. Write a program to solve the above task.

- Spring - March to May,
- Summer - June to August,
- Autumn - September to November and,
- Winter - December to February.

Month should be in the range 1 to 12. If not the output should be "Invalid month".

#### **Sample Input 1:**

Enter the month:11

#### **Sample Output 1:**

Season:Autumn

#### **Sample Input 2:**

Enter the month:13

#### **Sample Output 2:**

Invalid month

### Check for Leap Year

Given a year, check if the year is leap year or not. If yes, the output should be "Leap Year". Else output should be "Not a Leap Year". The input should be a positive four digit number. Else, the output should be "Invalid Year".

#### **Sample Input 1 :**

Enter the Year

2016

#### **Sample Output 1 :**

Leap Year

#### **Sample Input 2 :**

Enter the Year

2001

**Sample Output 2 :**

Not a Leap Year

## Highest Placement

SRV college wants to recognize the department which has succeeded in getting the maximum number of placements for this academic year. The departments that have participated in the recruitment drive are CSE,ECE, MECH. Help the college find the department getting maximum placements. Check for all the possible output given in the sample snapshot

Note : If any input is negative, the output should be "Input is invalid". If all department has equal number of placements, the output should be "None of the department has got the highest placement".

Sample Input 1:

Enter the no of students placed in CSE:90  
Enter the no of students placed in ECE:45  
Enter the no of students placed in MECH:70

**Sample Output 1:**

Highest placement  
CSE

**Sample Input 2:**

Enter the no of students placed in CSE:55  
Enter the no of students placed in ECE:85  
Enter the no of students placed in MECH:85

**Sample Output 2:**

Highest placement  
ECE  
MECH

**Sample Input 3:**

Enter the no of students placed in CSE:0  
Enter the no of students placed in ECE:0  
Enter the no of students placed in MECH:0

**Sample Output 3:**

None of the department has got the highest placement

**Sample Input 4:**

Enter the no of students placed in CSE:10  
Enter the no of students placed in ECE:-50  
Enter the no of students placed in MECH:40

**Sample Output 3:**

Input is Invalid

## Increment Calculation

ABC Technologies is in the process of increment the salary of the employees. This increment is done based on their salary and their performance appraisal rating.

1. If the appraisal rating is between 1 and 3, the increment is 10% of the salary.
2. If the appraisal rating is between 3.1 and 4, the increment is 25% of the salary.
3. If the appraisal rating is between 4.1 and 5, the increment is 30% of the salary.

Help them to do this, by writing a program that displays the incremented salary.

Write a class "IncrementCalculation.java" and write the main method in it.

Note : If either the salary is 0 or negative (or) if the appraisal rating is not in the range 1 to 5 (inclusive), then the output should be "Invalid Input".

### **Sample Input 1 :**

Enter the salary

8000

Enter the Performance appraisal rating

3

### **Sample Output 1 :**

8800

### **Sample Input 2 :**

Enter the salary

7500

Enter the Performance appraisal rating

4.3

### **Sample Output 2 :**

9750

**Sample Input 3 :**

Enter the salary

-5000

Enter the Performance appraisal rating

6

**Sample Output 3 :**

Invalid Input



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