

Core Java

Date:22-July-2022

1. Consider the following code snippet

Exercise: What output do you think the code will produce if number is 3?

Input

```
package Core_Java.Day3;

class Number{
    void number_function(){
        int number1 = 3;
        if(number1 >= 0)
            if(number1 == 0)
                System.out.println("First");
            else
                System.out.println("Second");
        System.out.println("Third");
    }
}

public class Day_Task_1 {

    public static void main(String[] args) {
        Number class_object = new Number();
        class_object.number_function();
    }
}
```

Output

```
Second
Third
```

2. Using only spaces and line break, {}, to reformat the above code

```
package Core_Java.Day3;

class Number{
    void number_function(){
        int number1 = 3;
        if(number1 >= 0)
            if(number1 == 0)
                System.out.println("First");
            else
                System.out.println("Second");
        System.out.println("Third");
    }
}

public class Day_Task_1 {

    public static void main(String[] args) {
        Number class_object = new Number();
        class_object.number_function();
    }
}
```

3. Convert the following if-else if code into switch case: for temperature

```
if(var==1)
System.out.println("low");
else if(var==2)
System.out.println("medium");
else if(var==3)
System.out.println("high");
else
System.out.println("abnormal");
```

Code

```
package Core_Java.Day3;

class Temperature{
    void temperature_operation(){
        int temperature_count = 2;
        switch (temperature_count){
            case 1:
                System.out.println("low");
                break;
            case 2:
                System.out.println("medium");
                break;
```

```

        case 3:
            System.out.println("high");
            break;
        default:
            System.out.println("abnormal");
    }
}

}

}

public class Task_Temperatue {
    public static void main(String[] args) {
        Temperature temperature_object = new Temperature();
        temperature_object.temperature_operation();
    }
}

```

Output

medium

4. Rewrite the following code using suitable 'if' command

```

switch(m){
    Case 0:
        x = x + 2;
        System.out.println("X = "+x);
        break;
    Case 1:
        x = x + 4;
        System.out.println("X = "+x);
        break;
    Case 2:
        x = x + 6;
        System.out.println("X = "+x);
        break;
}

```

Code

```
package Core_Java.Day3;

class If_Else_Operations {
    void if_else() {
        int number = 1, x = 1;
        if( number == 0 ) {
            x = x + 2;
            System.out.println("X = "+x);
        }
        else if ( number == 1 ) {
            x = x + 4;
            System.out.println("X = "+x);
        }
        else if ( number == 2 ) {
            x = x + 6;
            System.out.println("X = "+x);
        }
    }
}

public class If_Else_To_Switch {
    public static void main(String[] args) {
        If_Else_Operations if_else_object = new If_Else_Operations();
        if_else_object.if_else();
    }
}
```

Output

X = 5

5. Take two int values from the user and print the greatest among them

Code

```
package Core_Java.Day3;

import java.util.Scanner;

class Greater_Number_Two {
    int greatest_number(int num1, int num2) {
        if( num1 > num2 )
            return num1;
        else
```

```

        return num2;
    }
}

public class GREATEST_Number {
    public static void main(String[] args) {
        int num1, num2;
        Scanner sr = new Scanner(System.in);
        System.out.println("Enter the two numbers :");
        num1 = sr.nextInt();
        num2 = sr.nextInt();
        Greater_Number_Two greater_object = new Greater_Number_Two();
        System.out.println("Greater of "+num1+" and "+num2+" is
"+greater_object.greatest_number(num1, num2));
    }
}

```

Output

```

Enter the two numbers :
8
3
Greater of 8 and 3 is 8

```

6. Take input of the age of 3 people by user and determine oldest and youngest among them. (by applying age criteria)

Code

```

package Core_Java.Day3;

import java.util.Scanner;

class Age_Operation {
    void age_operation() {
        int age1, age2, age3;
        Scanner sc = new Scanner(System.in);
        System.out.println("Enter the age of each person : ");
        age1 = sc.nextInt();
        age2 = sc.nextInt();
        age3 = sc.nextInt();
        if( age1 > age2 && age1 > age3 ) {
            System.out.println("Oldest age is : " + age1);
            if( age2 > age3)
                System.out.println("Youngest age is : "+age3);
        }
    }
}

```

```

        else
            System.out.println("Youngest age is : "+age2);
    }
    else if ( age2 > age1 && age2 > age3 ) {
        System.out.println("Oldest age is : " + age2);
        if( age1 > age3)
            System.out.println("Youngest age is : "+age3);
        else
            System.out.println("Youngest age is : "+age1);
    }
    else if ( age3 > age1 && age3 > age2 ) {
        System.out.println("Oldest age is : " + age3);
        if( age1 > age2)
            System.out.println("Youngest age is : "+age2);
        else
            System.out.println("Youngest age is : "+age1);
    }
}

public class Age {

    public static void main(String[] args) {
        Age_Operation age_object = new Age_Operation();
        age_object.age_operation();
    }
}

```

Output

Enter the age of each person :

78

12

53

Oldest age is : 78

Youngest age is : 12

7. Perform the below operations

- a. Print below data: using any loop and jumping statement

Monday
Tuesday
Wednesday
Thursday
Friday
Saturday
Sunday

- b. Out of 7 days in a week, skip only Today's day.

- c. Out of 31, print date till today (passed till current date like for Jan 1-20 as today is 20th jan)

Code

```
package Core_Java.Day3;

public class Days {
    String[] week = {"Monday", "Tuesday", "Wednesday", "Thursday",
"Friday", "Saturday", "Sunday"};

    public void print_week_days() {
        for (String day: week) {
            System.out.println(day);
        }
    }

    public void print_day_skip() {
        for (String day: week) {
            if(day == "Friday")
                continue;

            System.out.println(day);
        }
    }

    public void date_of_month(int current_date) {
        for(int i = 1; i <= current_date; i++)
            System.out.println("July " + i);

        System.out.println("Today is " + current_date + " July");
    }
}
```

```
public static void main(String[] args) {  
    Days object1 = new Days();  
    object1.print_week_days();  
    System.out.println("\n");  
    object1.print_day_skip();  
    System.out.println("\n");  
    object1.date_of_month(22);  
}  
}
```

Output

Monday
Tuesday
Wednesday
Thursday
Friday
Saturday
Sunday

Monday
Tuesday
Wednesday
Thursday
Saturday
Sunday

July 1
July 2
July 3
July 4
July 5
July 6
July 7
July 8
July 9
July 10
July 11

July 12
July 13
July 14
July 15
July 16
July 17
July 18
July 19
July 20
July 21
July 22
Today is 22July

8. Star Pattern

Code

```
package Core_Java.Day3;

public class Star_Pattern1 {
    public static void main(String[] args) {
        for ( int i = 0 ; i < 5 ; i++ ) {
            for ( int j = 0 ; j <= i ; j++ ) {
                System.out.print("*");
            }
            System.out.println(" ");
        }
    }
}
```

Output:

```
*
**
***
****
*****
```