Java Assessment(2)

ANIMESH RITURAJ

OHR: 850058612

1)

```
package Java_Assessment_1;


import java.util.*;
public class First_Question {
  public static int meterReading(String input1, String input2, int input3) {
    int n1 = Integer.parseInt(input1.substring(5, input1.length()));
    int n2 = Integer.parseInt(input2.substring(5, input2.length()));
    int n = Math.abs((n2 - n1) * input3);
    return n;
  }
  public static void main(String[] args) {
    Scanner sc = new Scanner(System.in);
    String s1 = sc.nextLine();
    String s2 = sc.nextLine();
    int n = sc.nextInt();
    int n1 = meterReading(s1, s2, n);
    System.out.println(n1);
  }
}
```

Sample Input 1:

ABC2012345

ABC2012660

Sample Output 1: 1260

1)

```
package Java_Assessment_1;
```

```
import java.util.Scanner;

public class Second_Question{
   public static void main(String[] args) {
      Scanner s = new Scanner(System.in);
      String s1 = s.next();
      boolean b = colorCodeValidation(s1);
      if (b == true)
         System.out.println("Valid");
      else
         System.out.println("Invalid");
   }

   public static boolean colorCodeValidation(String s1) {
      boolean b = false, b1 = false;
      String s2 = s1.substring(1, s1.length());
      if (s1.length() == 7)
         if (s1.charAt(0) == '#')
         b1 = true;
      if (b1 == true)
         for (int i = 0; i < s2.length(); i++) {
         char c = s2.charAt(i);
         if (c != '#') {
            if (s2.matches("[A-Fa-f0-9]{6}|[A-Fa-f0-9]{3}"))
               b = true;
            else {
               b = false;
               break;
            }
         }
```

```
        }
        return b;
    }
}
```

Sample Input 1: #FF9922

Sample Output 1: Valid

2)

```
package Java_Assessment_1;

class Ncr_Class {

static int nCr(int n, int r)
{
    return fact(n) / (fact(r) *
                                fact(n - r));
}

//Returns factorial of n
static int fact(int n)
{
    int res = 1;
    for (int i = 2; i <= n; i++)
            res = res * i;
    return res;
}
public static void main(String[] args)
{
    int n = 5, r = 3;
    System.out.println(nCr(n, r));
}
```

```
}
```

Sample Input 1: 4 3

Sample Output 1: 10

3)

```
package Java_Assessment_1;
import java.util.*;
public class Fourth_Question {
        public static void main(String[] args) {
          Scanner sc = new Scanner(System.in);
          String a = sc.next();
          int d = 0;
          if (a.length() >= 8) {
            if (a.contains("#") || a.contains("@") || a.contains("_")) {
              char c = a.charAt(0);
              //System.out.println(c);
              if (Character.isAlphabetic(c)) {
                char dd = a.charAt(a.length() - 1);

                if ((Character.isAlphabetic(dd)) || (Character.isDigit(dd)))

                {
                  if (a.matches(".[0-9]{1,}.")
                      || a.matches(".[a-zA-Z]{1,}.")) {

                    System.out.println("Valid");

                  } else{
                    System.out.println("Not Valid");
                  }
```

```
            } else{
              System.out.println("Not Valid");
            }
          }
           else{
             System.out.println("Not Valid");
            }
        } else{
          System.out.println("Not Valid");
        }

      } else{
        System.out.println("Not Valid");
      }
    }
  }
```

Sample Input 1: ashok_23

Sample Output 1: Valid

Sample Input 2: 1980_200

Sample Output 2: Not valid