

/*

Name : Deepanshu Gupta

Section : AI & ML

Roll Number : 10

1. Write a Java program by using Scanner Class to prompt a user to input his/her name and then the output will be shown as an example below:

Hello <Your Name>!

*/

```
import java.util.*;
```

```
public class Main {
```

```
    public static void main(String[] args) {
```

```
        Scanner sc=new Scanner(System.in);
```

```
        System.out.print("Enter name: ");
```

```
        String name=sc.nextLine();
```

```
        System.out.println("Hello "+name);
```

```
    }
```

```
}
```

*****OUTPUT*****

Enter name: Deepanshu Gupta

Hello Deepanshu Gupta

/*

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2. Write a Java program to find the number of days in a month.

Test Data:

Input a month number: 2

Input a year: 2016

Expected Output:

February 2016 has 29 days

*/

```
import java.util.*;
```

```
import java.text.DateFormat;
```

```
import java.time.*;
```

```
import java.time.format.*;
```

```
public class Main {
```

```
    public static void main(String args[]) {
```

```
        Scanner sc=new Scanner(System.in);
```

```
        System.out.print("Input a month number: ");
```

```
        int m=sc.nextInt();
```

```
        System.out.print("Input a year: ");
```

```
        int y=sc.nextInt();
```

```
        int d=YearMonth.of(y, m).lengthOfMonth();
```

```
        String mon=Month.of(m).getDisplayName(TextStyle.FULL, Locale.ENGLISH);
```

```
        System.out.println(mon+" "+y+" has "+d+" days");
```

```
    }
```

```
}
```

*****OUTPUT*****

Input a month number: 2

Input a year: 2016

February 2016 has 29 days

/*

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3. Write a program in Java to display the cube of the number upto given an integer.

Test Data:

Input number of terms : 4

Expected Output :

Number is : 1 and cube of 1 is : 1

Number is : 2 and cube of 2 is : 8

Number is : 3 and cube of 3 is : 27

Number is : 4 and cube of 4 is : 64

*/

```
import java.util.*;
```

```
public class Main {
```

```
    public static void main(String[] args) {
```

```
        Scanner sc=new Scanner(System.in);
```

```
        System.out.print("Input number of terms: ");
```

```
        int x=sc.nextInt();
```

```
        for(int i=1; i<=x; i++)
```

```
            System.out.println("Number is: "+i+" and cube of "+i+" is: "+(i*i*i));
```

```
    }
```

```
}
```

*****OUTPUT*****

Input number of terms: 5

Number is: 1 and cube of 1 is: 1

Number is: 2 and cube of 2 is: 8

Number is: 3 and cube of 3 is: 27

Number is: 4 and cube of 4 is: 64

Number is: 5 and cube of 5 is: 125

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4. Write a program in Java to make such a pattern like a pyramid with a number which will repeat the number in the same row.

```
1
2 2
3 3 3
4 4 4 4
```

*/

```
import java.util.Scanner;
```

```
public class Main {
```

```
    public static void main(String[] args) {
```

```
        Scanner sc=new Scanner(System.in);
```

```
        System.out.print("Enter number of rows: ");
```

```
        int x=sc.nextInt();
```

```
        for(int i=1; i<=x; i++) {
```

```
            for(int j=x; j>i; j--)
```

```
                System.out.print(" ");
```

```
            for(int k=1; k<=i; k++)
```

```
                System.out.print(i+" ");
```

```
            System.out.println();
```

```
        }
```

```
    }
```

```
}
```

*****OUTPUT*****

Enter number of rows: 5

```
1
2 2
3 3 3
4 4 4 4
5 5 5 5 5
```

/*

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5. Write a Java program to get current full date and time.

*/

```
import java.util.*;
```

```
public class Main {
```

```
    public static void main(String[] args) {
```

```
        Date d=new Date();
```

```
        System.out.println("Current status: "+d);
```

```
    }
```

```
}
```

*****OUTPUT*****

Current status: Wed Mar 22 21:46:46 IST 2023

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6. Write a Java program to get a day of the week of a specific date.

*/

```
import java.time.*;
```

```
import java.time.format.*;
```

```
import java.util.*;
```

```
public class Main {
```

```
    public static void main(String[] args) {
```

```
        LocalDate d=LocalDate.of(2003, 10, 18);
```

```
        String day=d.getDayOfWeek().getDisplayName(TextStyle.FULL, Locale.getDefault());
```

```
        System.out.println("Day = "+day);
```

```
    }
```

```
}
```

*****OUTPUT*****

Day = Saturday

/*

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7. : Write a Java program to calculate your age.

*/

```
import java.util.*;
```

```
import java.time.*;
```

```
public class Main {
```

```
    public static void main(String args[]) {
```

```
        Scanner sc=new Scanner(System.in);
```

```
        System.out.print("Enter DOB in YYYY-MM-DD format: ");
```

```
        String x=sc.nextLine();
```

```
        LocalDate dob=LocalDate.parse(x);
```

```
        LocalDate td=LocalDate.now();
```

```
        int age=Period.between(dob, td).getYears();
```

```
        System.out.println("Age = "+age);
```

```
    }
```

```
}
```

*****OUTPUT*****

Enter DOB in YYYY-MM-DD format: 2003-10-18

Age = 19