INSTITUTE OF ENGINEERING & MANAGEMENT

Department of Computer Science & Engineering

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Enrollment No.	**: 12019002002039**
Subject Name	**: OOP Lab**
Assignment No.	**: Day 2**
Date	**: 11/08/2021**

1. **Add two floating-point numbers by taking input using java.util.Scanner class and java.io.BufferedReader class.**

Ans:

```java
import java.util.Scanner;
class prog1
{
    public static void main(String[] args)
    {
        Scanner obj1=new Scanner(System.in);
        System.out.println("Enter the first number");
        Float n1=obj1.nextFloat();
        System.out.println("Enter the second number");
        Float n2=obj1.nextFloat();
        Float sum=n1+n2;
        System.out.println("The sum is "+sum);
    }
}
```

```
PS D:\College shit\5th sem\OOPs\Day 2> java prog1
Enter the first number
6.9
Enter the second number
6.9
The sum is 13.8
```

```java
import java.io.*;
class prog1b
{
    public static void main(String[] args)throws IOException
    {
        BufferedReader r=new BufferedReader(new InputStreamReader(System.in));
        System.out.println("Enter 1st number");
        float f1=Float.parseFloat(r.readLine());
        System.out.println("Enter 2nd number");
        float f2=Float.parseFloat(r.readLine());
        float sum=f1+f2;
        System.out.println("The sum of the 2 numbers are "+sum);
    }

}
```

2. Write a program to find surface area and volume of Cylinder Using Constructors – Keyboard Input or Command Line Input.
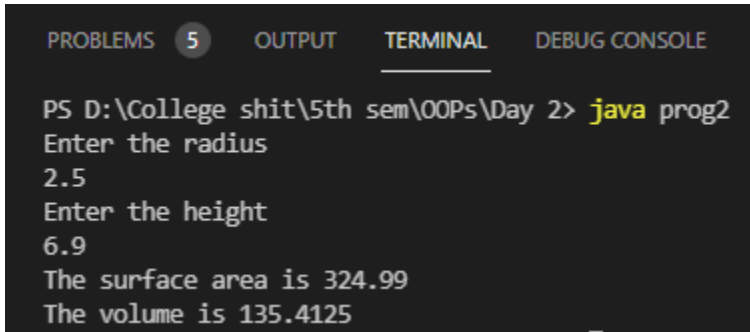
Ans:

```java
import java.util.Scanner;
public class prog2
{
    public static double v,sa;
    public prog2(double r, double h)
    {
        sa=6*3.14*r*h;
        v=3.14*r*r*h;
    }
    public static void main(String[] args)
    {
```

```java
        Scanner obj1=new Scanner(System.in);
        System.out.println("Enter the radius");
        double n1=obj1.nextDouble();
        System.out.println("Enter the height");
        double n2=obj1.nextDouble();
        prog2 obj2=new prog2(n1,n2);
        System.out.println("The surface area is "+sa);
        System.out.println("The volume is "+v);
    }
}
```

PROBLEMS 5   OUTPUT   TERMINAL   DEBUG CONSOLE

PS D:\College shit\5th sem\OOPs\Day 2> java prog2
Enter the radius
2.5
Enter the height
6.9
The surface area is 324.99
The volume is 135.4125

3. Create a class named First, make instance variable [int x], instance method [void show()] and put main() method inside that class and use the instance variable and method from main().

Ans:

```java
class First
{
    static int x;
    public static void main(String[] args)
    {
        x=0;
        First obj=new First();
        obj.show();
    }
    public static void show()
    {
        x=5;
        System.out.println(x);
    }
}
```

PROBLEMS 5   OUTPUT   TERMINAL   DEBUG CONSOLE

PS D:\College shit\5th sem\OOPs\Day 2> java First
5

4.Create a class; make its instance variable and instance method. Use them from main() which is declared in a different class.

Ans:

```
class prog4 extends First
{
    public static void main(String[] args)
    {
        First a=new First();
        a.show();
    }
}
```

```
PROBLEMS  5    OUTPUT    TERMINAL    DEBUG CONSOLE

PS D:\College shit\5th sem\OOPs\Day 2> java First
5
PS D:\College shit\5th sem\OOPs\Day 2> java prog4
5
```