1. **Question: Create a Java program that takes two integers as input from the user and prints their sum.**

```
mport java.util.Scanner;

public class practice {
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);

        System.out.println("give a value of x ");
        int x = scanner.nextInt();
        scanner.nextLine();

        System.out.println("give a value of y ");
        int y = scanner.nextInt();
        scanner.nextLine();

        int z = x+y;

        System.out.println("the value of the above " +  z);
    }
}
```

2. **Question: Write a Java program that calculates the area of a circle. Take the radius as input from the user (use Math.pow).**

```
import java.util.Scanner;
public class practice {
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);

        System.out.println("the value of r");
        double r = scanner.nextDouble();
        scanner.nextLine();
        double area = (22.0/7.0)* Math.pow(r,2);
        System.out.println("the answer is " + area );
    }
}
```

3. **Question: Given a temperature in Celsius, write a Java program to convert it to Fahrenheit. Take the Celsius temperature as input from the user (use the conversion formula: F = (C * 9/5) + 32).**

```java
import java.util.Scanner;
public class practice {
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);

        System.out.println("enter temperature in
celsius");
        double c = scanner.nextDouble();
        scanner.nextLine();
        double f = (c*9.0/5.0)+ 32;
        System.out.println("the answer is " + f );
    }
}
```

4. **Question: Create a Java program that asks the user for their name and age, and then prints a message with their name and age.**

```java
import java.util.Scanner;
public class practice {
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);

        System.out.println("what is your name");
        String name= scanner.nextLine() ;

        System.out.println("what is your age" );
        int age= scanner.nextInt();
        scanner.nextLine();

        System.out.println("hello " + name + " your age
is " + age);
    }
}
```

5. **Question: Write a Java program that calculates the volume of a rectangular prism. Take the length, width, and height as inputs from the user.**

```java
import java.util.Scanner;
public class practice {
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);

        System.out.println("length?");
```

```
        double length= scanner.nextDouble();
        scanner.nextLine();

        System.out.println("width?");
        Double width= scanner.nextDouble();
        scanner.nextLine();

        System.out.println("Height");
        Double height= scanner.nextDouble();
        scanner.nextLine();

        double volume=(length*width*height);

        System.out.println("the volume of the prism is "
+ volume);
    }
}
```

6. **Question: Given two floating-point numbers, write a Java program that swaps their values without using a temporary variable.**

```
import java.util.Scanner;

public class practice {
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);

        System.out.println("enter the value of a");
        double a = scanner.nextDouble();
        scanner.nextLine();

        System.out.println("enter the value of b");
        double b = scanner.nextDouble();
        scanner.nextLine();

        double c = a;
        a=b;
        b=c;

        System.out.println("The value of a is"  +  a);
        System.out.println("the value of b is"   + b );
```

```
    }
}
```

7. **Question: Create a Java program to check whether a given number is even or odd. Take the number as input from the user.**

```
import java.util.Scanner;

public class practice {
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);

        System.out.println("enter the value of a");
        double a = scanner.nextDouble();
        scanner.nextLine();

        if(a % 2 == 0){
            System.out.println("the number is even");
        }
        else{
            System.out.println("the value is odd");
        }

    }
}
```

8. **Question: Write a Java program to determine if a year is a leap year. Take the year as input from the user (use the leap year rule: a year is a leap year if it is divisible by 4 but not divisible by 100, except if it is divisible by 400).**

9. **Question: Create a Java program that calculates the area of a triangle. Take the base and height as inputs from the user.**

```
import java.util.Scanner;

public class practice {
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);
```

```
        System.out.println("enter the value of base ");
        double base = scanner.nextDouble();
        scanner.nextLine();

        System.out.println("enter the value of height ");
        double height = scanner.nextDouble();
        scanner.nextLine();

        double area = 1.0/2.0 * base * height;

        System.out.println("area is " + area );
    }
}
```

10. Question: Given the radius and height of a cylinder, write a Java program to calculate its volume. Take the radius and height as inputs from the user.

```
import java.util.Scanner;

public class practice {
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);

        System.out.println("enter the value of radius
");
        double radius = scanner.nextDouble();
        scanner.nextLine();

        System.out.println("enter the value of height
");
        double height = scanner.nextDouble();
        scanner.nextLine();

        double volume = 22.0/7.0  * Math.pow(radius,2)*
height;

        System.out.println("volume is " + volume );
    }
}
```