Q 1
wap to demonstrate ternary operator .define a variable marks .ask its value from user and using ternary operator check if marks > 40 store "Pass" in result varible else store "Fail"

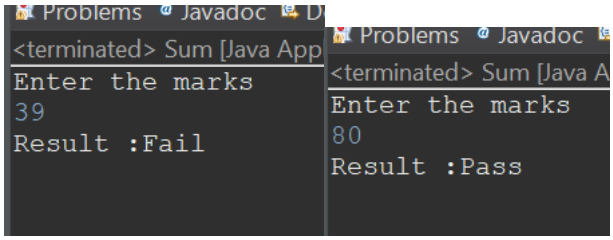
Sol:

```
package project1;
import java.util.Scanner;
public class Sum {

	public static void main(String[] args) {
		int marks;
		Scanner s = new Scanner(System.in);
		System.out.println("Enter the marks");
		marks = s.nextInt();
		String result = 40>marks ? "Fail" : "Pass";
		System.out.println("Result :" + result);
	}

}
```

Output:



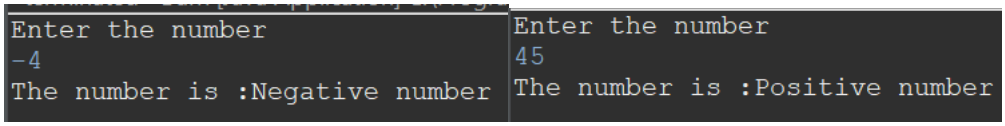
Q 2 using ternary check if number entered by user is positive or negative .
In case number is positive store "Positive number" else store negative number to Result variable

Sol:

```
package project1;
import java.util.Scanner;
public class Number {

	public static void main(String[] args) {
		int num;
		Scanner s = new Scanner(System.in);
		System.out.println("Enter the number");
		num = s.nextInt();
		String result = 0<num ? "Positive number" : "Negative number";
		System.out.println("The number is :" + result);
	}
}
```

Output:



Q 3 WAP to ask name ,age and salary of an employee and print on console.

Sol:

```
package project1;
import java.util.Scanner;
public class Employee {

	public static void main(String[] args) {
		String name;
		int age;
		double sal;
		Scanner s = new Scanner(System.in);
		System.out.print("Enter your name : ");
		name = s.nextLine();
		System.out.print("Enter your age : ");
		age = s.nextInt();
		System.out.print("Enter your salary : ");
		sal = s.nextDouble();
		System.out.println("The details of employee :");
		System.out.println("Name : " + name);
		System.out.println("Age : " + age);
		System.out.println("Salary : " + sal);
	}

}
```

Output:

```
Enter your name : Shailesh Patil
Enter your age : 27
Enter your salary : 27000
The details of employee :
Name : Shailesh Patil
Age : 27
Salary : 27000.0
```

Q 4 wap that ask two numbers from user and print greater number among two

Sol:

```
package project1;
import java.util.Scanner;
public class Greatest_num {

	public static void main(String[] args) {
		double a,b,c;
		Scanner s = new Scanner(System.in);
		System.out.print("Enter the first number =");
		a = s.nextDouble();
		System.out.print("Enter the second number =");
		b = s.nextDouble();
		c = a>b ? a : b;
		System.out.println("Greatest number is " + c);

	}

}
```

Output:

```
Enter the first number =246
Enter the second number =5465
Greatest number is 5465.0
```

Q 5 wap to ask product name and price of product from user and calculate discount i.e
if price > 2000 then discount is 10 percent of price
else
discount is 7 % of price

Sol:

```
package project1;
import java.util.Scanner;
public class Discount {

	public static void main(String[] args) {
		String name;
		double price,disc;
		Scanner s = new Scanner(System.in);
		System.out.print("Enter name of the product : ");
		name = s.nextLine();
		System.out.print("Enter the price of the product : ");
		price = s.nextDouble();
		disc = price>2000 ? 0.10*price : 0.07*price;
		System.out.println("Product : " + name);
		System.out.println("Price : " + price);
		System.out.println("Discount for this product : " + disc);

	}

}
```

Output:

```
Enter name of the product : erephones
Enter the price of the product : 2400
Product : erephones
Price : 2400.0
Discount for this product : 240.0
```

```
Enter name of the product : back cover
Enter the price of the product : 650
Product : back cover
Price : 650.0
Discount for this product : 45.50000000000001
```

Q 6 Wap to swap two numbers

Sol:

```
package project1;
import java.util.Scanner;
public class Swaping {

	public static void main(String[] args) {
		int a,b;
		Scanner s = new Scanner(System.in);
		System.out.println("Enter two numbers a & b : ");
```

```
            a = s.nextInt();
            b = s.nextInt();
            a=a+b;
            b=a-b;
            a=a-b;
            System.out.println("Numbers after swaping : " + a +"   " + b);

      }

}
```

Output:

```
Enter two numbers a & b :
100
200
Numbers after swaping : 200  100
```

Q 7 How to swap two numbers without using a third variable?

Sol:

```
package project1;
import java.util.Scanner;
public class Swaping {

      public static void main(String[] args) {
            int a,b;
            Scanner s = new Scanner(System.in);
            System.out.println("Enter two numbers a & b : ");
            a = s.nextInt();
            b = s.nextInt();
            a=a+b;
            b=a-b;
            a=a-b;
            System.out.println("First number a is " + a +"  and 2nd number
b is " + b);
      }

}
```

Output:

```
Enter two numbers a & b :
500
700
First number a is 700  and 2nd number b is 500
```

Q 8 wap to check is number is even or odd.

Sol:

```
package project1;
import java.util.Scanner;
public class Even_odd {

      public static void main(String[] args) {
            int a;
            Scanner s = new Scanner(System.in);
            System.out.println("Enter the number : ");
            a = s.nextInt();
```

```
            if(a%2==0)
                  System.out.println("The number is even");
            else
                  System.out.println("The number is odd");

      }

}
```

Output:

```
Enter the number :
46
The number is even
```

```
Enter the number :
45
The number is odd
```

Q 9 A school has following rules for grading system:

a. Below 25 - F
b. 25 to 45 - E
c. 45 to 50 - D
d. 50 to 60 - C
e. 60 to 80 - B
f. Above 80 - A

Ask user to enter marks and print the corresponding grade

Sol:

```
package project1;
import java.util.Scanner;
public class Grade {

      public static void main(String[] args) {
            double marks;
            Scanner s = new Scanner(System.in);
            System.out.println("Enter your marks = ");
            marks = s.nextDouble();
            if(marks<25)
                  System.out.println("Your grade is F");
            else if(marks>=25 && marks<45)
                  System.out.println("Your grade is E");
            else if(marks>=45 && marks<50)
                  System.out.println("Your grade is D");
            else if(marks>=50 && marks<60)
                  System.out.println("Your grade is C");
            else if(marks>=60 && marks<80)
                  System.out.println("Your grade is B");
            else if(marks>=80 && marks<101)
                  System.out.println("Your grade is A");
            else
                  System.out.println("You have entered invalid marks");

      }

}
```

Output:

```
Enter your marks =
45
Your grade is D
```

```
Enter your marks =
82
Your grade is A
```

```
Enter your marks =
124
You have entered invalid marks
```

Q 10 wap to check greater number among three numbers

Sol:

```
package project1;
import java.util.Scanner;
public class Greatest {

	public static void main(String[] args) {
		double a,b,c,d;
		Scanner s = new Scanner(System.in);
		System.out.print("Enter the first number =");
		a = s.nextDouble();
		System.out.print("Enter the second number =");
		b = s.nextDouble();
		System.out.print("Enter the third number =");
		c = s.nextDouble();
		d = a>b ? (a>c?a:c) : (b>c?b:c);
		System.out.println("Greatest number is " + d);


	}

}
```

Output:

```
Enter the first number =456
Enter the second number =56
Enter the third number =565
Greatest number is 565.0
```

```
Enter the first number =45
Enter the second number =65
Enter the third number =64
Greatest number is 65.0
```

```
Enter the first number =124.12
Enter the second number =364.15
Enter the third number =364.84
Greatest number is 364.84
```