

DAY- 4 8/5/25

Switch Case:

- cases have to be the same type as expressions, must be a constant or literal
- duplicate case values are not allowed
- break is used to terminate the sequence
- if break is not used, it will continue to next case
- default will execute when none of the above does
- if default is not at the end, put break after it

syntax:

```
switch(expression){  
    case:  
        Statement;  
        break;  
    default:  
        Statement;  
}
```

example (Print 7 days):

```
class DayWeek {  
    public static void main(String[] args) {  
        Scanner scanner = new Scanner(System.in);  
        System.out.println("Enter the number (1 to 7): ");  
        int day=scanner.nextInt();  
  
        switch(day){  
            case 1:  
                System.out.println("Monday");  
                break;  
            case 2:  
                System.out.println("Tuesday");  
                break;  
            case 3:  
                System.out.println("Wednesday");  
                break;  
            case 4:  
                System.out.println("Thursday");
```

```

        break;
    case 5:
        System.out.println("Friday");
    case 6:
        System.out.println("Saturday");
    case 7:
        System.out.println("Sunday");
    default:
        System.out.println("Invalid");
    }

    scanner.close();
}
}

```

enhance:

```

switch(day){
    case 1 -> System.out.println("Monday");
    case 2 -> System.out.println("Tuesday");
    case 3 -> System.out.println("Wednesday");
    default -> System.out.println("Invalid");
}

```

Ternary Operator :

enhancing code if else:

```

int n=5
if(n==5){
    System.out.println("Yes");
}else{
    System.out.println("No");
}

```

enchanced:

Syntax:

(condition)? statement1 : statement2;

example:

```
(n==5)? System.out.println("Yes"):System.out.println("No");
```

or

```
String res = (n==5)?("Yes") : ("No");  
System.out.println(res);
```

enhance FOR LOOP or FOR EACH LOOP:

- In collections we don't have index values in those situation we have to use for each loop

example:

```
int[]arr ={1,2,3,4,5};
```

```
for(int var:arr){  
    System.out .println(var)  
}
```

Code example with enhance:

1. Switch case:

```
class SimpleNum{  
    public static void main(String[] args){  
        int n=3;  
  
        switch(num){  
            case 1:  
                System.out.println("Number 1");  
                break;  
            case 2:  
                System.out.println("Number 2");  
                break;  
            case 3:  
                System.out.println("Number 3");  
                break;  
            default:  
                System.out.println("Invalid");  
        }  
    }  
}
```

```
}
```

enhanced

```
class SimpleNum{
    public static void main(String[] args){
        int n=3;

        switch(num){
            case 1 --> System.out.println("Number 1");
            case 2 --> System.out.println("Number 2");
            case 3 --> System.out.println("Number 3");
            default --> System.out.println("Invaild");

        }
    }
}
```

1. if else:

```
class NumberCheck{
    public static void main(String[] args){
        int n = -5;

        if(n>0){
            System.out.println("Postive");
        }
        else{
            System.out.println("Negative");
        }
    }
}
```

Enhanced:

```
class NumberCheck{
    public static void main(String[] args){
        int n = -5;

        (n==5)?System.out.println("Postive") : System.out.println("Neagative");
    }
}
```

```

    }
}

```

For loop or for each loop

```

class NumberExample{
    public static void main(String[] args){
        int[] numbers = {10,20,30,40,50};

        System.out.println("Print Array");

        for(int n : numbers) {
            System.out.println(n);
        }

    }
}

```

enhanced

```

class NumberExample{
    public static void main(String[] args){
        int[]arr={10,20,30,40,50};

        for(int var:arr){
            System.out.println(var);
        }

    }
}

```

```

1
123

```

1234 12345 1234567 code this

```

class Numbers{
    public static void main(String[]args){
        for(int i= 1;i<=5;i++){
            for(int j =1;j<=i;j++){
                System.out.print(j);
            }
        }
    }
}

```

```

        System.out.println();
    }
}

```

for center aligned:

```

class Numbers{
    public static void main(String[]args){
        for(int i= 1;i<=5;i++){
            for(int s=1;s<=5-i;s++){
                System.out.print(" ");
            }
            for(int j =1;j<=(2*i -1);j++){
                System.out.print(j);
            }
            System.out.println();
        }
    }
}

```

for Printing * pattern

**** ***

```

class Numbers {
    public static void main(String[] args) {
        for (int i = 5; i >= 1; i--) {
            for (int j = 1; j <= i; j++) {
                System.out.print("*");
            }
            System.out.println();
        }
    }
}

```

-

```
class Numbers {
    public static void main(String[] args) {
        for (int i = 1; i < 5; i++){
            for(int s=1; s<=5-i; s++){
                System.out.print(" ");
            }
            for (int j = 1; j <= 2*i-1; j++) {
                System.out.print("*");
            }
            System.out.println();
        }
    }
}
```

Reversing the number:

```
class Main{
    public static void main(String[] args){
        int n=123;
        int res=0;
        while(n!=0){
            int rem = n%10;
            res = res*10+rem;
            n=n/10;
        }
        System.out.println(res);
    }
}
```

Addition of number :

```
class Main{
    public static void main(String[] args){
        int n=1231;
        int res=0;
        while(n>9){
            while(n!=0){
```

```

        int rem = n%10;
        res = res+ rem;
        n=n/10;
    }
}
System.out.println(res);
}
}

```

•

```

*****

```

```

*****

```

```

*****

```

```

*****

```

•

```

class Numbers {
    public static void main(String[] args) {
        for (int i = 1; i < 5; i++){
            for(int s=1; s<=5-i; s++){
                System.out.print(" ");
            }
            for (int j = 1; j <=2*i-1 ; j++) {
                System.out.print("*");
            }
            System.out.println();
        }
        for (int i = 1; i < 5; i++){
            for(int s=1; s<=5-i; s++){
                System.out.print(" ");
            }
            for (int j = 1; j <=2*i-1 ; j++) {
                System.out.print("*");
            }
        }
    }
}

```



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

```

edit this above not correct