Control Statements:

- Java compiler executes the code from top to bottom. The statements in the code are executed according to the order in which they appear. However, Java provides statements that can be used to control the flow of Java code. Such statements are called control flow statements. It is one of the fundamental features of Java, which provides a smooth flow of program.

- If.
- If-else.
- If else if ladder.
- Nested-if else.
- switch case
- for,while,do-while,break,continue.

1.IF Statement:

- The Java if statement tests the condition. It executes the *if block* if condition is true.
- Syntax:
- if(condition)

```
{
      //code to be executed
}
```

2.IF-Else Statement:

- The Java if-else statement also tests the condition. It executes the *if block* if condition is true otherwise *else block* is executed.
- Syntax:

```
if(condition)
{
      //code if condition is true
}else
{
      //code if condition is false
}
```

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-
-

3.IF ELSE IF Ladder Statements

- The if-else-if ladder statement executes one condition from multiple statements.

```
if(condition1)
{
    //code to be executed if condition1 is true
}else if(condition2)
{
    //code to be executed if condition2 is true
}
else if(condition3)
{
    //code to be executed if condition3 is true
}
...
else
{
    //code to be executed if all the conditions are false

}
```


```java
public class Main2
{

	public static void main(String[] args)
	{
		//Control Statements ---> IF and IF-Else

		// if block executes only when the condition is true

		/*
		  Syntax:

		 * if(condition)
		 * {
		 *		(Will Execute if the condition is True)
		 *		code statements
		 * }
		 *
		 * if(condition)
		 * {
		 *		(Will Execute if the condition is True)
		 *		code statements
		 * }
		 * else
		 * {
		 *		(Will Execute if the condition is False)
		 *		code statements
		 * }
		 *
		 * */
		int age=12;
		if(age>18)
		{
			System.out.println("You are Eligible!");
		}
		else// It Executes when the if Condition is False
		{
			System.out.println("You are not Eligible!");
```

```
		}

		//------------------------------

		System.out.println("\n----------------------\n");
		int num2=50;

		if(num2>70)
		{

			System.out.println(num2+" is Greater");
		}
		else// No conditions are checked in else statements
		{
			System.out.println(num2+" is Smaller");

		}

//-------------------------------------------------------

		System.out.println("\n----------------------\n");


//IF ELSE-IF LADDER

		System.out.println("IF-ELSE IF LADDER\n");

		int marks=-20;

		if(marks>=91 && marks<=100)//if(False )
		{

			System.out.println("A-Grade Shabaash Beta");
		}
		else if(marks>=71 && marks<=90)//if(False)
		{

			System.out.println("B-Grade, Koshish karte raho.");
		}
		else if(marks>=51 && marks<=70)//if(False)
		{
			System.out.println("C-Grade,Work More Hard");

		}
		else if(marks>=40 && marks<=50)//if(false)
		{
		System.out.println("D-Grade, Aalsi Pana Kam Kar,Sudhar ja");

		}
		else if(marks>=0 && marks<=39)//if(True)
```


```
		{

			System.out.println("F-Grade,Gaya Bete Tu");
		}
		else
		{
			System.out.println("Marks Barabar Do");
	}

}
```

OutPut/-

```
You are not Eligible!

-------------------------

50 is Smaller

-------------------------

IF-ELSE IF LADDER

Marks Barabar Do
```