Control Statements

1: if
2: if else
3: else if
4: nested if
5: switch

```
package ControlStatement;
public class example1_if
{
	public static void main(String[] args)
	{

		int marks=33;

		//  33>=35
		if(marks>=35)		//if(marks>34)
		{
			System.out.println("Pass");
		}


//			if(condition)  -> true
//			{
//				// if body
//			}

	}
}
```

```
package ControlStatement;
public class example2_if_else
{
	public static void main(String[] args) {

		int marks=30;

		// 30>=35
		if(marks>=35)
		{
			System.out.println("Pass");
		}
		else
		{
			System.out.println("Fail");
		}

//			if(condition)   // if condition -> true
//			{
//				//if body
//			}
//			else    //if condition -> false
//			{
//				//else body
//			}
	}
}
```

```
package ControlStatement;
public class example3_else_if1
{
	public static void main(String[] args)
	{
		int marks=32;

		//32>=65
		if(marks>=65)
		{
			System.out.println("Distinction");
		}
		//	32>=60  &  62<=64  = true
		else if(marks>=60 & marks<=64)		//60 to 64
		{
			System.out.println("1st class");
		}
		//	32>=50  &  55<=59
		else if(marks>=50 & marks<=59)		//50 to 59
		{
			System.out.println("2nd class");
		}
		//	32>=35  & 44<=49
		else if(marks>=35 & marks<=49)		//35 to 49
		{
			System.out.println("Pass");
		}
		//  32<=34
		else if(marks<=34)
		{
			System.out.println("Fail");
		}


		// true & true => true
		// true & false => false
		// false & true => false
		// false & false => false

//		if(condition1)
//		{
//
//		}
//		else if(condition2)
//		{
//
//		}
//		else if(condition3)
//		{
//
//		}
//		else if(condition3)
//		{
//
//		}
	}
}
```

```java
package ControlStatement;
public class example3_else_if2
{
	public static void main(String[] args)
	{
		int marks=32;

		//32>=65
		if(marks>=65)
		{
			System.out.println("Distinction");
		}
		//	32>=60  &  62<=64  = true
		else if(marks>=60 & marks<=64)		//60 to 64
		{
			System.out.println("1st class");
		}
		//	32>=50  &  55<=59
		else if(marks>=50 & marks<=59)		//50 to 59
		{
			System.out.println("2nd class");
		}
		//	32>=35  & 44<=49
		else if(marks>=35 & marks<=49)		//35 to 49
		{
			System.out.println("Pass");
		}
		//  32<=34
		else
		{
			System.out.println("Fail");
		}
	}
}
```

```java
package ControlStatement;
public class example3_else_if3
{
	public static void main(String[] args)
	{
		int SA=700;

		//30000>=20000
		if(SA>=20000)
		{
			System.out.println("20%");
		}
		//30000>=10000
		else if(SA>=10000)
		{
			System.out.println("10%");
		}
		else if(SA>=1000)		//50 to 59
		{
			System.out.println("5%");
		}
		else if(SA>=500)		//35 to 49
		{
			System.out.println("2%");
		}
		else
		{
			System.out.println("no discount");
		}
	}
}
```

```
package ControlStatement;
public class example4_nested_if1
{
	public static void main(String[] args)
	{
		int PEM=400;
		int MEM=900;

		if(PEM>=300)
		{
			System.out.println("eligible for mains exam");

			if(MEM>=800)
			{
				System.out.println("got selected");
			}
		}

//		if(condition1)	//outer if
//		{
//			if(condition2)	//nested/inner if
//			{
//
//			}
//		}
	}
}
```

```
package ControlStatement;
public class example4_nested_if2
{
	public static void main(String[] args)
	{
		int SA=7000;

	  // 7000>=500
		if(SA>=500)
		{
			System.out.println("No delivery charges applied");

			// 7000>=5000
			if(SA>5000)
			{
				System.out.println("10 % off");

			}
		}
	}
}
```

```java
package ControlStatement;
public class example4_nested_if3
{
	public static void main(String[] args)
	{
		int PEM=350;
		int MEM=900;

		//350>=300
		if(PEM>=300)    //outer if
		{
			System.out.println("eligible for mains exam");

			//900>=800
			if(MEM>=800)     //inner if
			{
				System.out.println("got selected");
			}
			else
			{
				System.out.println("Rejected from mains exam MEM<800");
			}
		}
		else
		{
			System.out.println("Not eligible for mains exam PEM<300");
		}


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

```java
package ControlStatement;
public class example5_switch1
{
	public static void main(String[] args)
	{

		switch(2)
		{
			case 1:   System.out.println("Today is Mon");
			break;

			case 2:   System.out.println("Today is Tue");
			break;

			case 3:   System.out.println("Today is Wed");
			break;

			case 4:   System.out.println("Today is Thr");
			break;

			case 5:   System.out.println("Today is Fri");
			break;

			case 6:   System.out.println("Today is Sat");
			break;

			case 7:   System.out.println("Today is Sun");
			break;

			default: System.out.println("Invalid input");
			break;
		}
	}
}
```

```
package ControlStatement;
public class example5_switch2
{
	public static void main(String[] args)
	{

		switch("AA")
		{
			case "CD":    System.out.println("running CD code");
			break;

			case "CW":    System.out.println("running CW code");
			break;

			case "MT":    System.out.println("running MT code");
			break;

			case "MS":    System.out.println("running MS code");
			break;

			case "BI":    System.out.println("running BI code");
			break;

			default: System.out.println("Wrong input");
			break;
		}
	}
}
```