**Condition logic and Block statement:**

**Relational Operators**

**Conditional Assignment**

**If else**

**Chaining if-else**

**Logical Operators**

**Block statement**

**Switch**

**Relational Operators**

**>**

**>=**

**<**

**<=**

**==**

public static void main(String[] args) {  
 int a =10;  
 int b=10;  
 System.*out*.println(a==b);  
}

public class ConditionAssignment {  
  
 public static void main(String[] args) {  
  
 int a=3;  
 int b=5;  
 //conditional operator  
 boolean res= (a>b)?true:false;  
 System.*out*.println(res);  
 }  
  
}

**If else:**

public class IfExample {  
 public static void main(String[] args) {  
  
 int val1 = 90; // this value  
 int val2 = 10; //  
  
 if (val1 > val2) {  
 System.*out*.println("val1 is bigger");  
 }  
 else if(val2>val1)  
 {  
 System.*out*.println("val2 is bigger");  
 }  
 else {  
 System.*out*.println("both are equal");  
 }  
 }  
}

**Calengine sample:**

package com.org.conitionlogic;  
  
public class Calengine {  
  
 public static void main(String[] args) {  
  
 double val1 = 100.0d;  
 double val2 = 50.0d;  
 double res = 0.0d;  
 char opCode = 'a';  
  
 if (opCode == 'a') {  
 res = val1 + val2;  
 } else if (opCode == 's') {  
 res = val1 - val2;  
 } else if (opCode == 'm') {  
 res = val1 \* val2;  
 } else if (opCode == 'd') {  
 res = val1 / val2;  
 }  
 System.*out*.println(res);  
  
 }  
}

**Logical Operators:**

**&&**

package com.org.conitionlogic;  
  
public class LogicalOperators {  
 public static void main(String[] args) {  
 int a = 10;  
 int b = 20;  
 int c = 30;  
  
 if (a > b && a > c) {  
 System.*out*.println("a is bigger");  
 } else if (b > a && b > c) {  
 System.*out*.println("b is bigger");  
 } else if (c > a && c > b) {  
 System.*out*.println("c is bigger");  
 }  
  
 }  
  
}

package com.org.conitionlogic;  
  
public class SwitchStatement {  
  
 public static void main(String[] args) {  
  
 double val1 = 100.0d;  
 double val2 = 50.0d;  
 double res = 0.0d;  
 char opCode = 'z';  
  
 switch(opCode){  
 case 'a':  
 res = val1 + val2;  
 break;  
 case 's':  
 res = val1 - val2;  
 break;  
 case 'm':  
 res = val1 \* val2;  
 break;  
 case 'd':  
 res = val1 / val2;  
 break;  
 default:  
 System.*out*.println("invalid input");  
 res=0.0;  
 }  
 System.*out*.println(res);  
 }  
}

package com.org.conitionlogic;  
  
public class BlockStetementandVariableScope {  
  
 public static void main(String[] args) {  
 double student=30.0d;  
 double rooms=4.0d;  
 double avg=0.0d;  
  
 if(rooms>0.0d) {  
 avg = student / rooms;  
 }  
 System.*out*.println(avg);  
 }  
}

package com.org.conitionlogic;  
  
public class SwitchStatementArray {  
  
 public static void main(String[] args) {  
  
 double[] leftvals = {100.0d, 25.0d, 22.0d, 11.0d};  
 double[] rightvals = {50.0d, 92.0d, 17.0d, 3.0d};  
 char[] opscode = {'d', 'a', 's', 'm'};  
 double res[] = new double[4];  
  
 for (int i = 0; i < opscode.length; i++) {  
  
 switch (opscode[i]) {  
 case 'a':  
 res[i] = leftvals[i] + rightvals[i];  
 break;  
 case 's':  
 res[i] = leftvals[i] - rightvals[i];  
 break;  
 case 'm':  
 res[i] = leftvals[i] \* rightvals[i];  
 break;  
 case 'd':  
 if (rightvals[i] != 0) {  
 res[i] = leftvals[i] / rightvals[i];  
 } else {  
 System.*out*.println("given number val2 is zero");  
 }  
 break;  
 default:  
 System.*out*.println("invalid input");  
 res[i] = 0.0d;  
 }  
 }  
 System.*out*.println(res);  
 for (int i = 0; i < res.length; i++) {  
 System.*out*.println(res[i]);  
 }  
 }  
}