**ASSIGNMENT 4: OPERATORS**

**1.Arithmetic Operator**

**public** **class** arithmetic {

**public** **static** **void** main(String[] args) {

**int** a=20;

**int** b=10;

**int** res1,res2,res3,res4,res5;

res1=a+b;//30

res2=a-b;//10

res3=a\*b;//200

res4=a/b;//2

res5=a%b;//0

System.***out***.println(res1+" "+res2+" "+res3+" "+res4+" "+res5);

}

}

**Output:**

30 10 200 2 0

**2 .Arithmetic assignment operator**

**public** **class** assignop {

**public** **static** **void** main(String[] args) {

**int** a=2;

**int** b=1,c=5;

a+=b;//3

System.***out***.println(a);

a-=a;//0

System.***out***.println(a);

b\*=c;//5

System.***out***.println(b);

}

}

**Output:**

3

0

5

**3 .Relational operator.**

**public** **class** relationalop {

**public** **static** **void** main(String[] args) {

**int** a=10,b=12,c=10;

System.***out***.println(a>=c);//true

System.***out***.println(a==c);//true

System.***out***.println(a>=b);//false

System.***out***.println(a<=b);//true

}

}

**Output**:

true

true

false

true

**4 .Logical Operator.**

**public** **class** logicalop {

**public** **static** **void** main(String[] args) {

**int** a=5,b=10,c=15;

System.***out***.println(a==b&&b<=c);//false

System.***out***.println(a<=b&&b<=c);//true

System.***out***.println(a==b&&b==c);//false

}

}

**Output:**

false

true

false

**5.Assignmnet Operator**

**public** **class** assignop1 {

**public** **static** **void** main(String[] args) {

**int** a=10,b=10,a1=10;

//without assignment operator

a=a+b;//a=a+a; or a=a-b;

System.***out***.println(a);

//with assignment operator

a1+=b;//a1+=a1; or a1-=b;

System.***out***.println(a1);

}

}

**Output:**

20

20

**6 .Program to check student age is greater than 18**

**public** **class** student {

**public** **static** **void** main(String[] args) {

**int** age=15;

**boolean** b;

b=age>18;

System.***out***.println("age is greater than 18 ="+b);

}

}

**Output:**

age is greater than 18 =false

**7 .checking number is even or odd using if else**

**public** **class** evenorodd {

**public** **static** **void** main(String[] args) {

**int** a=10,b=11;

**if**(b%2==0)

{

System.***out***.println("even");

}

**else**

{

System.***out***.println("odd");

}

**if**(a%2==0)

{

System.***out***.println("even");

}

**else**

{

System.***out***.println("odd");

}

}

}

**Output**:

odd

even

**8 .both the number is same or not**

**public** **class** same {

**public** **static** **void** main(String[] args) {

**int** a=100,c=100,d=200;

**boolean** b;

b=a==c;

System.***out***.println("a and c is same = "+b);

b=a==d;

System.***out***.println(" a and and d is same= "+b);

}

}

**Output:**

a and c is same = true

a and and d is same= false

**9.Program check whether number is greater than 100 and 200**

**public** **class** greater {

**public** **static** **void** main(String[] args) {

**int** a=500,d=50;

**boolean** b;

b=a>100&&a>200;//true

System.***out***.println("500 is greater than 100 and 200 = "+b);

b=d>100&&d>200;//false

System.***out***.println("50 is greater than 100 and 200 = "+b);

}

}

**Output:**

500 is greater than 100 and 200 = true

50 is greater than 100 and 200 = false