

1. Write your own program using arithmetic operators.

Code:

```
package Assignment5;
import java.util.Scanner;
public class Arithmetic {

    public static void main(String[] args) {
        // TODO Auto-generated method stub
        int x,y;
        Scanner sc=new Scanner(System.in);
        System.out.println("Enter the numbers to perform arithmetic operation:");
        x=sc.nextInt();
        y=sc.nextInt();
        int add=x+y;
        System.out.println("addition of x and y is:"+add);
        int sub=x-y;
        System.out.println("subtraction of x and y is:"+sub);
        int mul=x*y;
        System.out.println("multiplication of x and y is:"+mul);
        int div=x/y;
        System.out.println("division of x and y is:"+div);
        int mod=x%y;
        System.out.println("modulus of x and y is:"+mod);

    }

}
```

2. Write your own program using arithmetic assignment operators.

Code:

```
package Assignment5;

import java.util.Scanner;

public class Assignment2 {

    public static void main(String[] args) {
        //Object system;
        // TODO Auto-generated method stub
        //Arithmetic assignment operators are =,+=,-=,/=,%=,*=
        Scanner sc=new Scanner(System.in);
        int a,b;
        System.out.println("Enter two numbers a and b:");
        a=sc.nextInt();
        b=sc.nextInt();
        System.out.println(a=b); //assigns b value to a
    }

}
```

```

        System.out.println(a+=b);//a=a+b
        System.out.println(a-=b);//a=a-b
        System.out.println(a*=b);//a=a*b
        System.out.println(a/=b);//a=a/b
        System.out.println(a%=b);//a=a&b

    }

}

```

3. Write your own program using relational operators.

code:

```

package Assignment5;
import java.util.Scanner;
public class relational {

    public static void main(String[] args) {
        // TODO Auto-generated method stub
        Scanner sc=new Scanner(System.in);
        System.out.println("Enter the values of a and b:");
        int a=sc.nextInt();
        int b=sc.nextInt();
        System.out.println("a is equal to b is:"+(a==b));
        System.out.println("a is greater than b is:"+(a>b));
        System.out.println("a is less than b is:"+(a<b));
        System.out.println("a is greater than or equal to b is:"+(a>=b));
        System.out.println("a is less than or equal to b is:"+(a<=b));
        System.out.println("a is not equal to b is:"+(a!=b));
    }

}

```

4. Write your own program using logical operators.

code:

```

package Assignment5;
import java.util.Scanner;

public class Logical {

    public static void main(String[] args) {
        // TODO Auto-generated method stub
        Scanner sc=new Scanner(System.in);
        System.out.println("Enter the four numbers:");
        int a=sc.nextInt();
        int b=sc.nextInt();
        int c=sc.nextInt();
        int d=sc.nextInt();
    }

}

```

```

        //logical and operator(&&)It prints true if both the expressions are true
or else false
        System.out.println("logical AND operator:");
        System.out.println((a>b)&&(c>d));
        System.out.println((a>b)&&(c<d));
        System.out.println((a<b)&&(c>d));
        System.out.println((a>b)|| (c>d));
        //logical OR operator(||)It prints true if either of the expression is true
        System.out.println("logical OR operator:");
        System.out.println((a>b)|| (c>d));
        System.out.println((a>b)|| (c<d));
        System.out.println((a<b)|| (c>d));
        System.out.println((a<b)|| (c<d));
        //logical NOT operator(!) prints true if the expression is false and vice
versa
        System.out.println("logical NOT operator:");
        System.out.println(!(a==b));
        System.out.println(!(a<b));
        System.out.println(!(a<=b));
        System.out.println(!(a>=b));

    }

}

```

5. Write your own program to show the use of assignment operator.

code:

```

package Assignment5;

import java.util.Scanner;

public class ExampleAssignment {

    public static void main(String[] args) {
        // TODO Auto-generated method stub
        int a;
        Scanner sc=new Scanner(System.in);
        System.out.println("enter the number:");
        a=sc.nextInt();
        System.out.println("Assignment operator += is: "+(a+=1));
        System.out.println("Assignment operator += is: "+(a-=2));
        System.out.println("Assignment operator += is: "+(a*=3));
        System.out.println("Assignment operator += is: "+(a/=1));
    }

}

```

6. Write a program to check age of student is greater than 18.

```

code:
package Assignment5;

import java.util.Scanner;

public class Age {

    public static void main(String[] args) {
        // TODO Auto-generated method stub
        Scanner sc=new Scanner(System.in);
        System.out.println("Enter the numbers:");
        int age=sc.nextInt();

        //entered age is eligible it will say true else it will say false
        System.out.println((age>=18?"student age is greater than 18":"student age is
not greater than 18"));

    }

}

```

7. Write a program to check number is even or odd.
code:

```

package Assignment5;
import java.util.Scanner;

public class EvenOdd {

    public static void main(String[] args) {
        // TODO Auto-generated method stub
        Scanner input=new Scanner(System.in);
        System.out.println("Enter the number");
        int num=input.nextInt();
        String evenOdd=(num%2==0)?"even":"odd";
        System.out.println(num + " is "+evenOdd);
    }

}

```

8. write a program to check whether number is greater than 100 and 200.

```

code:
package Assignment5;

import java.util.Scanner;

public class Greater {

```

```

        public static void main(String[] args) {
            // TODO Auto-generated method stub
            Scanner sc=new Scanner(System.in);
            System.out.println("Enter the number which is greater than 100 and 200:");
            int num=sc.nextInt();
            System.out.println("if entered number is greater than 100 and 200 it will
say true else it will say false");
            System.out.println(num>100&&num>200);

        }

}

```

9.write a program to check whether both numbers are same or not.

code:

```

package Assignment5;
import java.util.Scanner;
public class NumberSame {

    public static void main(String[] args) {
        // TODO Auto-generated method stub
        Scanner sc=new Scanner(System.in);
        int a,b;
        System.out.println("Enter the values of a and b:");
        a=sc.nextInt();
        b=sc.nextInt();
        String Equal=(a==b)?"equal":"notequal";
        System.out.println("The number a and b are:"+Equal);
    }

}

```

Note: dont use the if and switch case. write a simple programs without using if and switch in all the above programs.