1.Write your own program using arthmetic 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("substraction 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("modlusof x and y is:"+mod);


	}

}
```

2.Write your own program using arthmetic 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.