Problem Statement

1.Write a program to print the sum of two number without using + operator.

other operators can be used.

2.Write a program to print the result of the following expression provided the interger variable

a is 20 and b is 10.

int b = a-- - --a;

int c = a--;

int d = a>>2;

int e = a&b;

Solution

```
import java.util.Scanner; ;// it will call the scanner class in util package
class Add// class name
        {
         public static void main(String[] args)
        {
        int a, b, sum;//initializing variables
        System.out.println("Enter two number:");
        Scanner add= new Scanner(System.in); //input from user
        a= add.nextInt();//1st number from keyboard
        b= add.nextInt();//2nd number from keyboard
        sum= a-~b-1; // complement operator used for sum without using plus operator
        System.out.println("Addition of "+a+" and "+b+" is:"+sum);
 }
         }
```

ScreenShot of Result

```
C:\sweety_backup\Training\Assignment1> javac Add.java

C:\sweety_backup\Training\Assignment1>java Add
Enter two number:
12 14
Addition of 12 and 14 is:26
```

2: Solution

```
class Operator
{
 public static void main(String[] args)
{
int a, b, c,d ,e ;
a=20;
b=10;
b= a-- - --a;
System.out.println(b);
c= a-- ;
System.out.println(c);
d= a>>2 ;
System.out.println(d);
b= a-- - --a;
System.out.println(b);
}
}
```

Screen Shot of Result

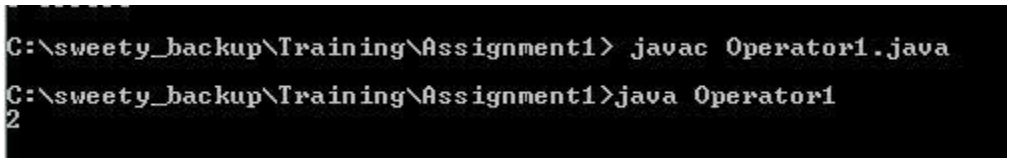
```
C:\sweety_backup\Training\Assignment1\Java filr> javac Operator.java

C:\sweety_backup\Training\Assignment1\Java filr>java Operator
2
18
4
2
```

If we Execute expression in different program

a) int b= a-- - --a;

```
class Operator1
{
 public static void main(String[] args)
{
int a, b;
a=20;
b= a-- - --a; // a—is post decresment and –a is pre decresment operator
System.out.println(b);
}
}
```

ScreenShot of Result



b) int c = a--;

```
Class operator1
{
 public static void main(string[] args)
{
int a,c ;
a=20;
c= a-- ;// post decreament operator
System.out.println(c);
```

}

}

Screen Shot of Result

```
C:\sweety_backup\Training\Assignment1> javac Operator2.java

C:\sweety_backup\Training\Assignment1>java Operator2
20
```

c) int d = a>>2;

```
class Operator3

{

 public static void main(String[] args)

{

int a,d ;

a=20;

d= a>>2 ;// Bitwise right shift with sign extension

System.out.println(d);

}

}
```

Screen Shot of Result

```
C:\sweety_backup\Training\Assignment1> javac Operator3.java

C:\sweety_backup\Training\Assignment1>
C:\sweety_backup\Training\Assignment1>
C:\sweety_backup\Training\Assignment1>
C:\sweety_backup\Training\Assignment1>
C:\sweety_backup\Training\Assignment1>
C:\sweety_backup\Training\Assignment1>
C:\sweety_backup\Training\Assignment1>java Operator3
5
```

d)int e = a&b;

```
class Operator4
{
 public static void main(String[] args)
{
int a,b,e;
a=20;
b=10;

e = a&b; // bitwise & operator is used
System.out.println(e);
}
}
```

Result Screenshot