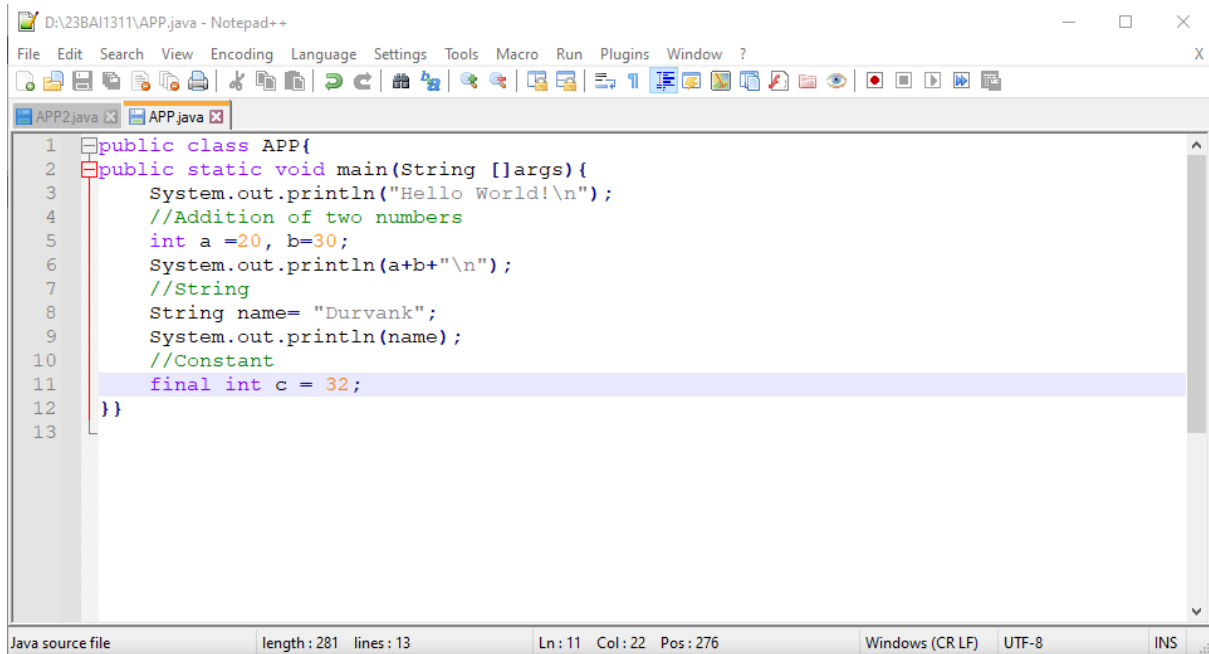


# 23BAI1311

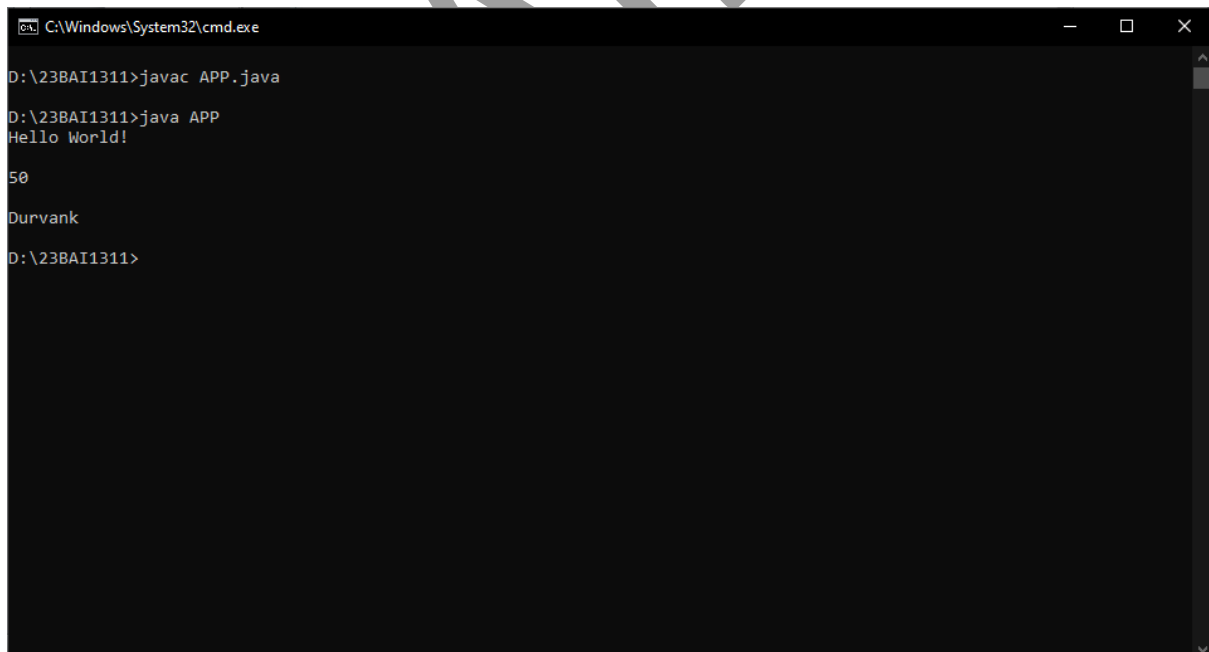
## Durvank Mahesh Gade

16/07/2024



```
1 public class APP{
2 public static void main(String []args){
3     System.out.println("Hello World!\n");
4     //Addition of two numbers
5     int a =20, b=30;
6     System.out.println(a+b+"\n");
7     //String
8     String name= "Durvank";
9     System.out.println(name);
10    //Constant
11    final int c = 32;
12 }
13 }
```

Java source file      length : 281   lines : 13      Ln : 11   Col : 22   Pos : 276      Windows (CR LF)   UTF-8   INS



```
C:\Windows\System32\cmd.exe

D:\23BAI1311>javac APP.java

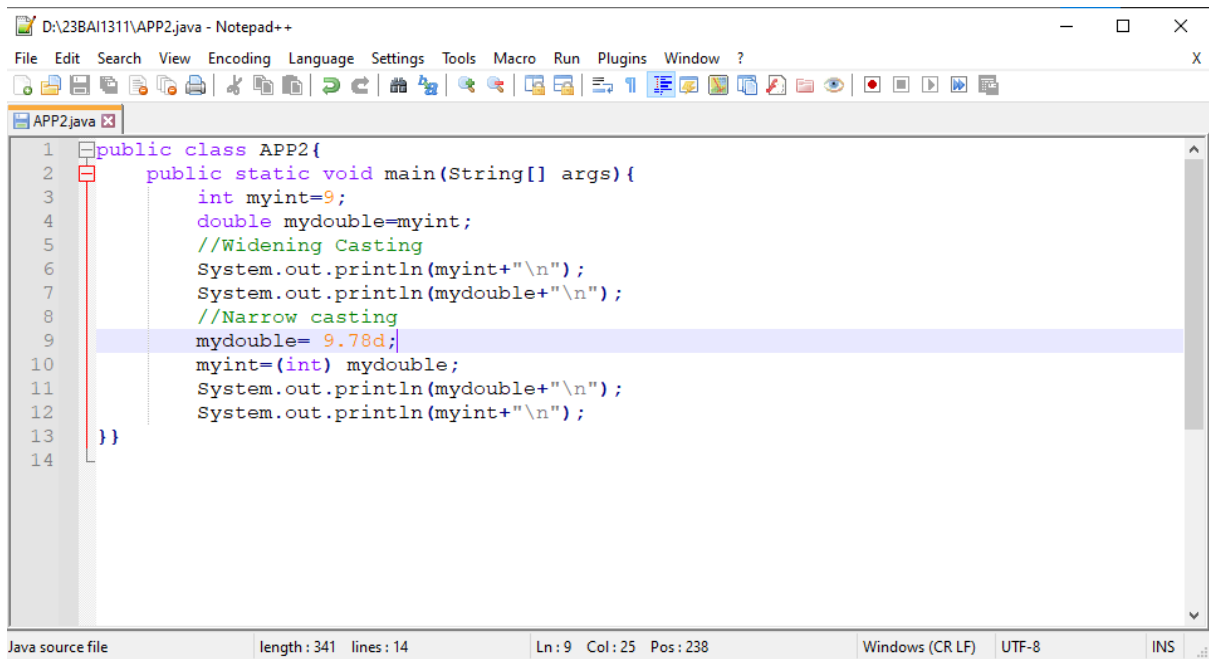
D:\23BAI1311>java APP
Hello World!

50

Durvank

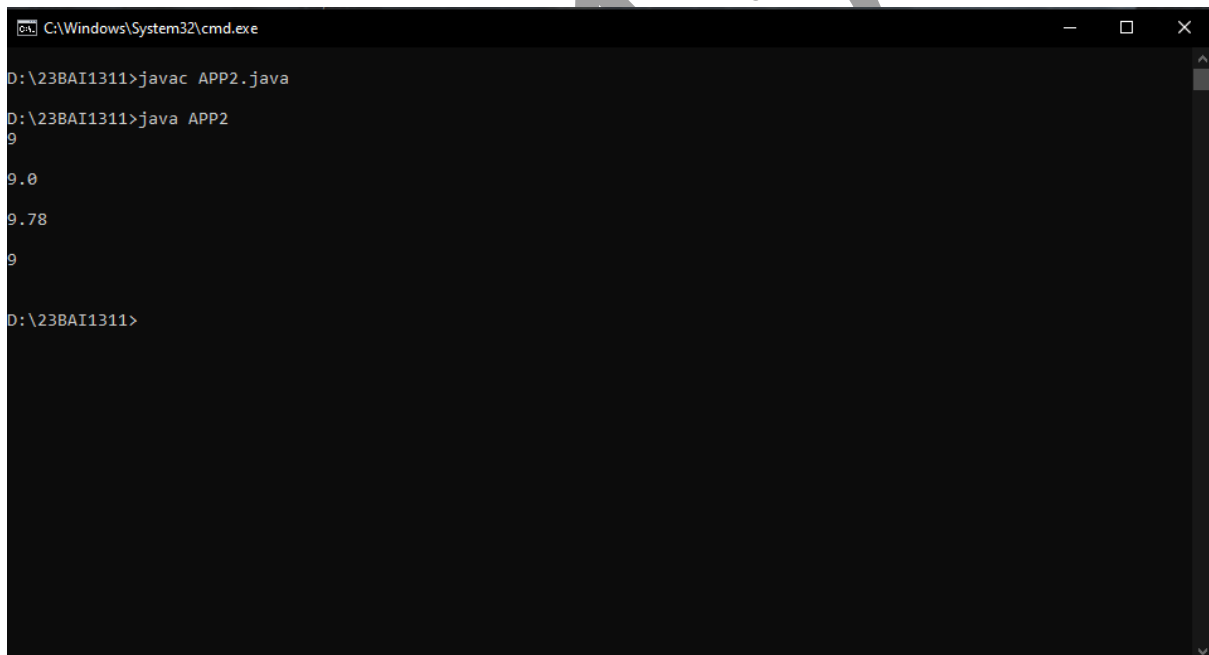
D:\23BAI1311>
```

18/07/2024



```
1 public class APP2{
2     public static void main(String[] args){
3         int myint=9;
4         double mydouble=myint;
5         //Widening Casting
6         System.out.println(myint+"\n");
7         System.out.println(mydouble+"\n");
8         //Narrow casting
9         mydouble= 9.78d;
10        myint=(int) mydouble;
11        System.out.println(mydouble+"\n");
12        System.out.println(myint+"\n");
13    }
14 }
```

Java source file      length: 341   lines: 14      Ln: 9   Col: 25   Pos: 238      Windows (CR LF)   UTF-8   INS



```
C:\Windows\System32\cmd.exe

D:\23BAI1311>javac APP2.java

D:\23BAI1311>java APP2
9
9.0
9.78
9

D:\23BAI1311>
```

D:\23BAI1311\APP3.java - Notepad++

File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?

APP3.java

```
1 public class APP3{
2     public static void main(String[] args){
3         int sum1=100+50;
4         String name= "Durvank";
5         System.out.println(name+sum1);
6     }
7 }
```

Java source file length: 144 lines: 7 Ln: 5 Col: 35 Pos: 139 Windows (CR LF) UTF-8 INS

C:\Windows\System32\cmd.exe

```
D:\23BAI1311>javac APP3.java
D:\23BAI1311>java APP3
Durvank150
D:\23BAI1311>
```

D:\23BAI1311\APP4.java - Notepad++

File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?

APP4.java

```
1 public class APP4{
2     public static void main(String[] args){
3         int x,y;
4         x=20;
5         y=(x==1)?61:90;
6         System.out.println("Value of y is:" + y);
7         y=(x==20)?61:90;
8         System.out.println("Value of y is:" + y);
9     }
10 }
11
```

Java source file length: 220 lines: 11 Ln: 1 Col: 18 Pos: 18 Windows (CR LF) UTF-8 INS

C:\Windows\System32\cmd.exe

```
D:\23BAI1311>javac APP4.java
D:\23BAI1311>java APP4
Value of y is:90
Value of y is:61
D:\23BAI1311>
```

The image shows a Notepad++ window titled "D:\23BAI1311\APP5.java - Notepad++" with a menu bar (File, Edit, Search, View, Encoding, Language, Settings, Tools, Macro, Run, Plugins, Window, ?) and a toolbar. The code in the editor is as follows:

```
1 public class APP5{
2     public static void main(String[] args){
3         String name="Durvank";
4         System.out.println("Size of string is:"+ name.length());
5         System.out.println(name.toUpperCase());
6         System.out.println(name.toLowerCase());
7         System.out.println(name.indexOf("van"));
8     }
9 }
```

The status bar at the bottom of the Notepad++ window displays: "Java source file", "length : 284 lines : 9", "Ln : 7 Col : 49 Pos : 279", "Windows (CR LF)", "UTF-8", and "INS".

Below the Notepad++ window is a Windows command prompt window titled "C:\Windows\System32\cmd.exe". It shows the following commands and output:

```
D:\23BAI1311>javac APP5.java
D:\23BAI1311>java APP5
Size of string is:7
DURVANK
durvank
3
D:\23BAI1311>
```

22/07/2024

The image displays two screenshots of an IDE (likely IntelliJ IDEA) showing a Java program. The top screenshot shows the initial code with a bug, and the bottom screenshot shows the code after a fix.

**Top Screenshot:**

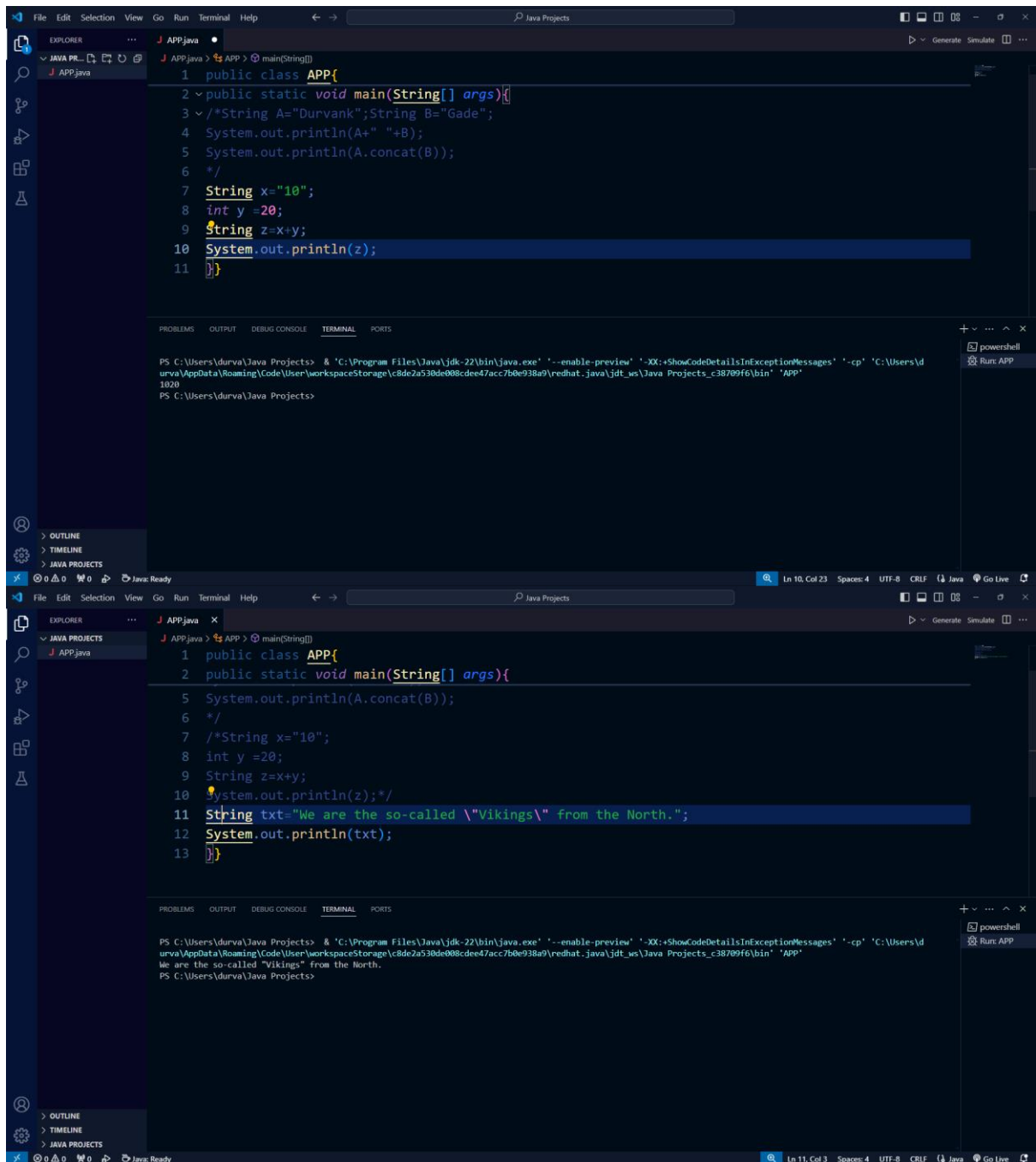
```
1 public class APP{
2     Run|Debug
3     public static void main(String[] args){
4         String A="Durvank";String B="Gade";
5         System.out.println(A+" "+B);
6     }
7 }
```

The terminal output shows the command: `PS C:\Users\durva\Java Projects> & "C:\Program Files\Java\jdk-22\bin\java.exe" "-enable-preview" "-XX:+ShowCodeDetailsInExceptionMessages" "-cp" "C:\Users\durva\AppData\Local\Code\User\workspaceStorage\c8b63a538da88cdea47acc7b6d938a9\redhat-.java" "User\Java Projects_c8b63a538da88cdea47acc7b6d938a9\APP"`. The output is: `Durvank Gade`.

**Bottom Screenshot:**

```
1 public class APP{
2     Run|Debug
3     public static void main(String[] args){
4         String A="Durvank";String B="Gade";
5         //System.out.println(A+" "+B);
6         System.out.println(A.concat(B));
7     }
8 }
```

The terminal output is the same as the top screenshot, showing the command and the output `Durvank Gade`.



```
1 public class APP2{  
    Run | Debug  
2 public static void main(String[] args){  
3     System.out.println(Math.max(a:5,b:10));  
4     System.out.println(Math.min(a:5,b:10));  
5     System.out.println(Math.sqrt(a:64));  
6     System.out.println(Math.abs(-4.7));  
7     System.out.println(Math.random());  
8 }
```

```
PS C:\Users\durva> & 'C:\Program Files\Java\jdk-22\bin\java.exe' '--enable-preview' '-XX:+ShowCodeDetailsInExceptionMessages' '-cp' 'C:\Users\durva\AppData\Local\Temp\vscodesws_6d  
ab0\jdt_ws\jdt.ls-java-project\bin' 'APP2'
```

10

5

8.0

4.7

0.6066473127902583

PS C:\Users\durva>



23/07/24

Program 1:

```
23-07-24 > J APP.java > APP > main(String[])
1 public class APP{
    Run | Debug
2     public static void main(String[] args){
3         boolean isJavaFun=true;
4         boolean isFishTasty=false;
5         System.out.println(isJavaFun);
6         System.out.println(isFishTasty);
7     }
8 }
```

Output:

```
PS D:\Docs\Material\3rd Sem\23BAI1311-JavaLab> & 'C:\
va\AppData\Roaming\Code\User\workspaceStorage\b875497c
true
false
PS D:\Docs\Material\3rd Sem\23BAI1311-JavaLab>
```

Program 2:

```
    }*/  
    int x=10; int y=9;  
    System.out.println(x>y);}
```

Output:

```
PS D:\Docs\Material\3rd Sem\23BAI1311-JavaLab> & 'C:\Program Files\Java\jdk-11.0.10\bin\java.exe' -Xmx1024m -Xms128m -Djava.class.path=C:\Users\durva\AppData\Roaming\Code\User\workspaceStorage\b87549...  
true  
PS D:\Docs\Material\3rd Sem\23BAI1311-JavaLab>
```

Program 3:

```
public class APP23070 {  
    Run | Debug  
    public static void main(String[] Args){  
        if(20>18){  
            System.out.println(x:"20m is greater than 18");  
        }  
    }  
}
```

Output:

```
PS D:\Docs\Material\3rd Sem\23BAI1311-JavaLab> & 'C:\Program Files\Java\jdk-11.0.10\bin\java.exe' -Xmx1024m -Xms128m -Djava.class.path=C:\Users\durva\AppData\Roaming\Code\User\workspaceStorage\b87549...  
20m is greater than 18  
PS D:\Docs\Material\3rd Sem\23BAI1311-JavaLab>
```

Program 4:

```
        System.out.println( 20 is greater than 18 );  
    }*/  
    int time =20;  
    if (time<18){System.out.println(x:"Good day");}  
    else{System.out.println(x:"Good Evening");}  
}  
}
```

Output:

```
PS D:\Docs\Material\3rd Sem\23BAI1311-JavaLab> & 'C:\Program Files  
p' 'C:\Users\durva\AppData\Roaming\Code\User\workspaceStorage\b87  
Good Evening  
PS D:\Docs\Material\3rd Sem\23BAI1311-JavaLab>
```

### Program 5:

```
1 public class APP2307b {
2     public static void main(String[] Args){
13
14         int day=4;
15         switch (day) {
16             case 1:
17                 System.out.println(x:"Monday");
18                 break;
19             case 2:
20                 System.out.println(x:"Tuesday");
21                 break;
22             case 3:
23                 System.out.println(x:"Wednesday");
24                 break;
25             case 4:
26                 System.out.println(x:"Thursday");
27                 break;
28             case 5:
29                 System.out.println(x:"Friday");
30                 break;
31             case 6:
32                 System.out.println(x:"Sat");
33                 break;
34             case 7:
35                 System.out.println(x:"Sunday");
36                 break;
37             default:
38                 System.out.println(x:"Invalid");
39                 break;
40         }
41     }
42 }
```

### Output:

```
Thursday
PS D:\Docs\Material\3rd Sem\23BAI1311-JavaLab>
```

Program 7:

```
1 public class APP2307c {  
    Run | Debug  
2     public static void main(String[] args){  
3         int i = 0;  
4         while(i<5){  
5             System.out.println(i);  
6             i++;  
7         }  
8     }  
9 }  
10
```

Output:

```
PS D:\Docs\Material\3rd Sem\23BA11311-JavaLab> java -cp .\AppData\Roaming\Code\User\workspaceStorage\b875497c60bbd44b80000000000000000\APP2307c\bin APP2307c  
0  
1  
2  
3  
4
```

Program 8:

```
10     int i=0;  
11     do{  
12         System.out.println(i);  
13         i++;  
14     }  
15     while(i<5);
```

Output:

```
PS D:\Docs\Material\3rd Sem\23BA11311-JavaLab> java -cp .\AppData\Roaming\Code\User\workspaceStorage\b875497c60bbd44b80000000000000000\APP2307c\bin APP2307c  
0  
1  
2  
3  
4
```

Program 9:

```
String[] Cars={"Audi","Maruti","BMW","McLauren"};
for(String i:Cars){
    System.out.println(i);
}
```

Output:

```
va\AppData\Roaming\Code\User\workspaceStor
Audi
Maruti
BMW
McLauren
```

Program 10:

```
1 public class APP2307c {
2     public static void main(String[] args){
20         String[] Cars={"Audi","Maruti","BMW","McLauren"};
21         for(String i:Cars){
22             System.out.println(i);
23         }
24         for(int i=0;i<10;i++){
25             if(i==4){
26                 break;
27             }
28             System.out.println(i);
29         }
30     }
31 }
```

Output:

```
0
1
2
3
```

Program 11:

```
1 public class APP2307c {
2     public static void main(String[] args){
29         System.out.println(1);
30     }
31     /*
32     for(int i=0;i<10;i++){
33         if(i==4){
34             continue;
35         }
36         System.out.println(i);
37     }
38 }
39 }
40 }
41 }
```

Output:

```
va\AppData\Roaming\Code\User\workspaceStorage\b875497c60
0
1
2
3
5
6
7
8
9
```

Program 12:

```
import java.util.Scanner;
public class APP2307d {
    Run | Debug
    public static void main(String[] args){
        Scanner myobj= new Scanner(System.in);
        String username;
        System.out.println(x:"Enter your username");
        username = myobj.nextLine();
        System.out.println("Username is: "+ username);
    }
}
```

Output:

```
Enter your username
Durvank
Username is: Durvank
PS D:\Docs\Material\3rd Sem\23BAT1311-JavaLab>
```

25/07/2024

Program 1:

```
1 public class APP2507{
    Run | Debug
2     public static void main(String[] args){
3         char[] helloArray={'h','e','l','l','o','.'};
4         String helloString=new String(helloArray);
5         System.out.println(helloString);
6     }
7 }
```

Output:

```
va\AppData\Roaming\Code\User\workspaceStorage\b8
hello.
PS D:\Docs\Material\3rd Sem\23BAI1311-JavaLab>
```

Program 2:

```
1 import java.util.Scanner;
2 public class Calculator{
    Run | Debug
3     public static void main(String[] args){
4         int operandA, operandB; int i=0;
5         String operation;
6         String loop;
7         String add="ADD";
8         String sub="SUB";
9         String mul="MULTIPLY";
10        String div="DIVIDE";
11        String cont="YES";
12        String end="NO";
13        Scanner n = new Scanner(System.in);
14        while(i<=0){
15            System.out.println(x:"Enter the arithmetic operation you need to perform:\n1.ADD\n2.SUB\n3
16            operation = n.nextLine();
17            System.out.println(x:"Enter Operand 1");
18            operandA = n.nextInt();
19            System.out.println(x:"Enter Operand 2");
20            operandB = n.nextInt();
21            n.nextLine();
22            if(operation.equals(add)){
23                System.out.println(operandA+operandB);
24            }
```



```

5     else if(operation.equals(sub)){
6         System.out.println(operandA-operandB);
7     }
8     else if(operation.equals(mul)){
9         System.out.println(operandA*operandB);
10    }
11    else if(operation.equals(div)){
12        System.out.println(operandA/operandB);
13    }
14
15    System.out.println(x:"YES to continue or NO to exit: ");
16    loop = n.nextLine();
17    if(loop.equals(cont)){
18        continue;
19    }
20    else{
21        break;
22    }
23 }
24 }
25 }

```

Output:

```

PS D:\Docs\Material\3rd Sem\23BAI1311-JavaLab> & 'C:\Program Files\Java\jdk-22\bin\java.exe' '--enable-preview'
va\AppData\Roaming\Code\User\workspaceStorage\b875497c60bbd44b86998893825b3943\redhat.java\jdt_ws\23BAI1311-Java
Enter the arithmetic operation you need to perform:
1.ADD
2.SUB
3.MULTIPLY
4.DIVIDE
ADD
Enter Operand 1
12
Enter Operand 2
13
25
YES to continue or NO to exit:
YES
Enter the arithmetic operation you need to perform:
1.ADD
2.SUB
3.MULTIPLY
4.DIVIDE
DIVIDE
Enter Operand 1
12
Enter Operand 2
2
6
YES to continue or NO to exit:
NO
PS D:\Docs\Material\3rd Sem\23BAI1311-JavaLab>

```