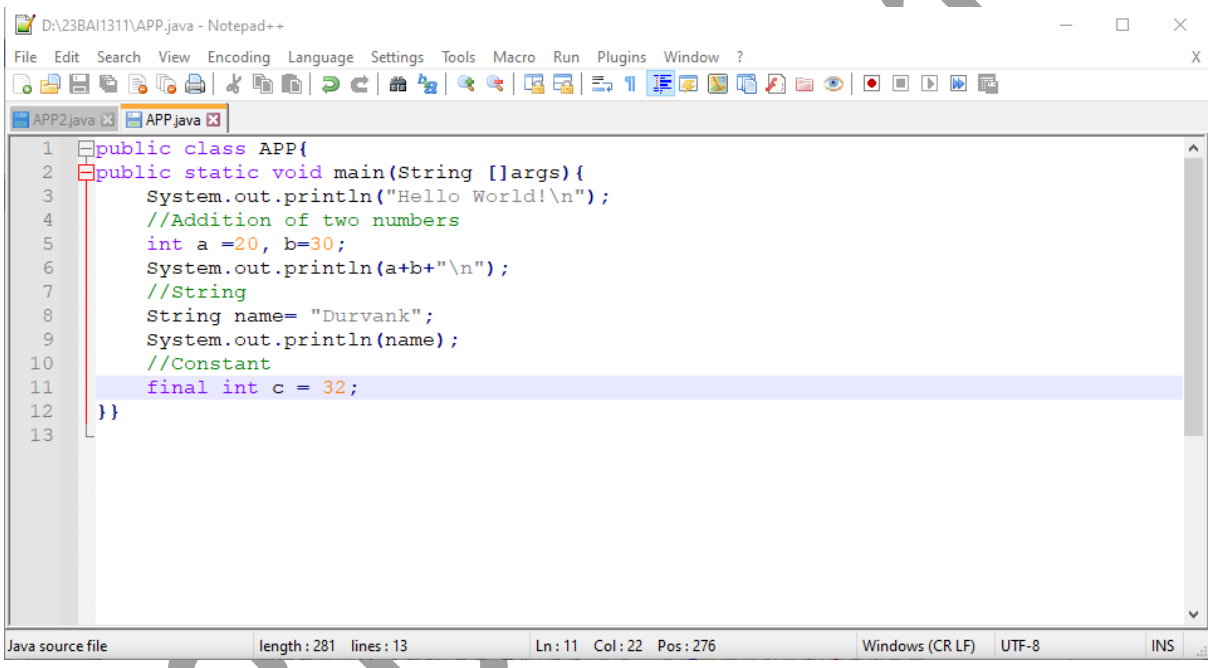
23BAI1311

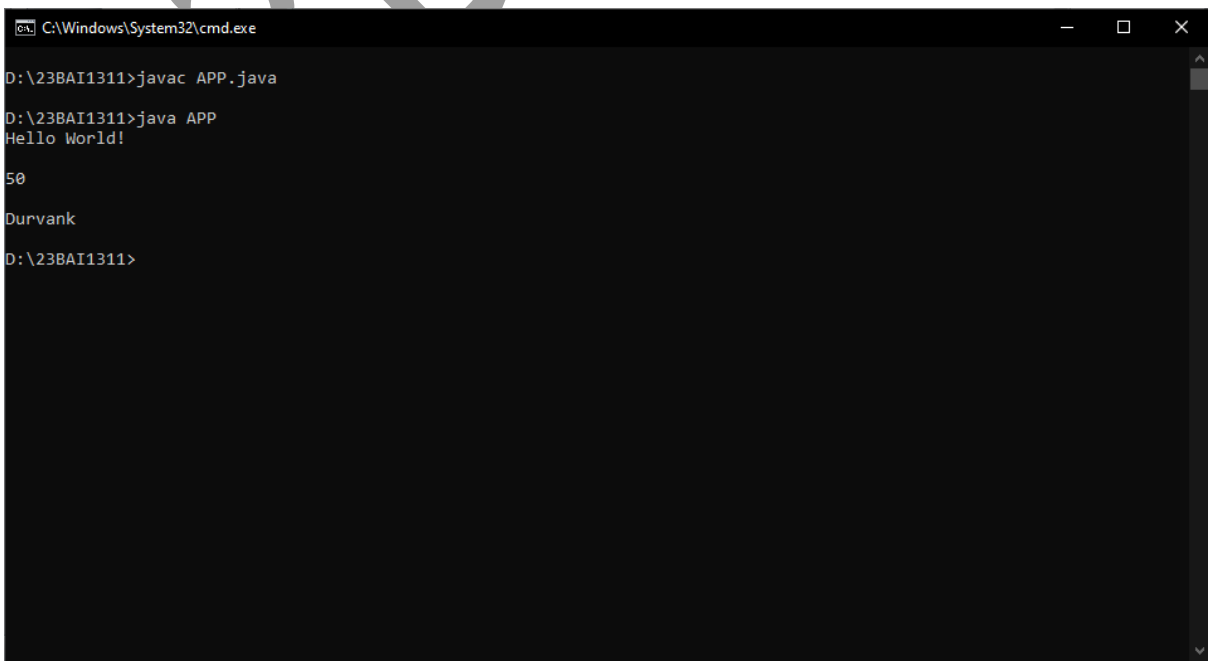
Durvank Mahesh Gade

GitHub Repository:

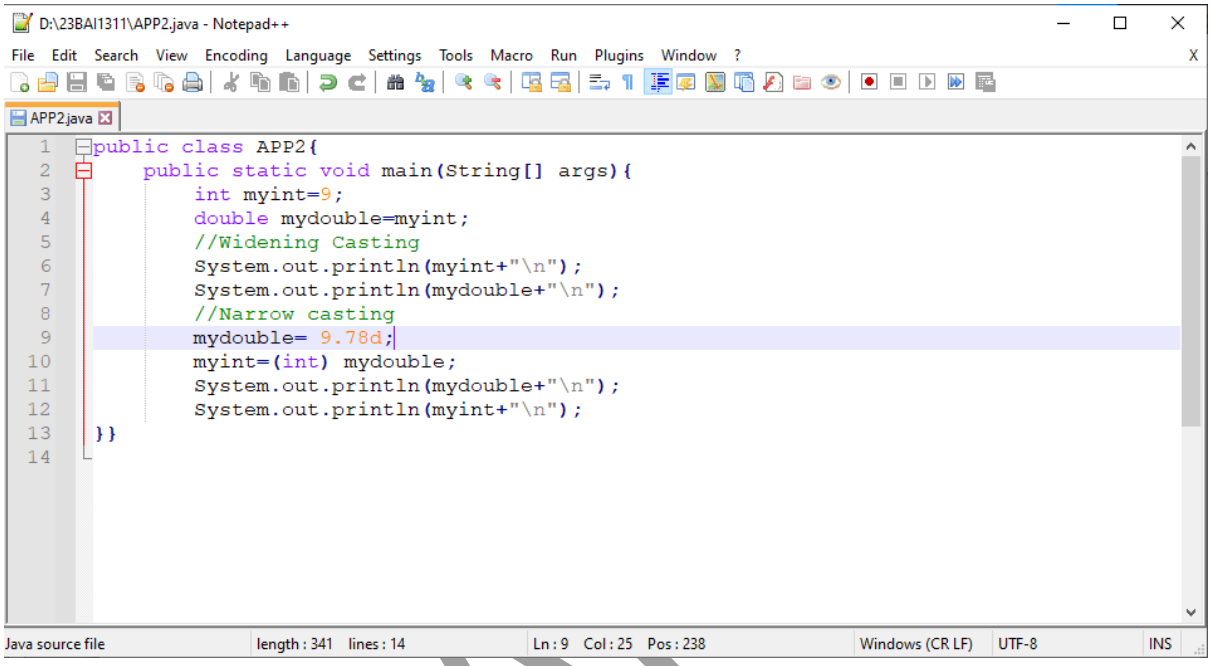
[23BAI1311DurvankMaheshGade/23BAI1311_DurvankGade_JavaLab (github.com)]

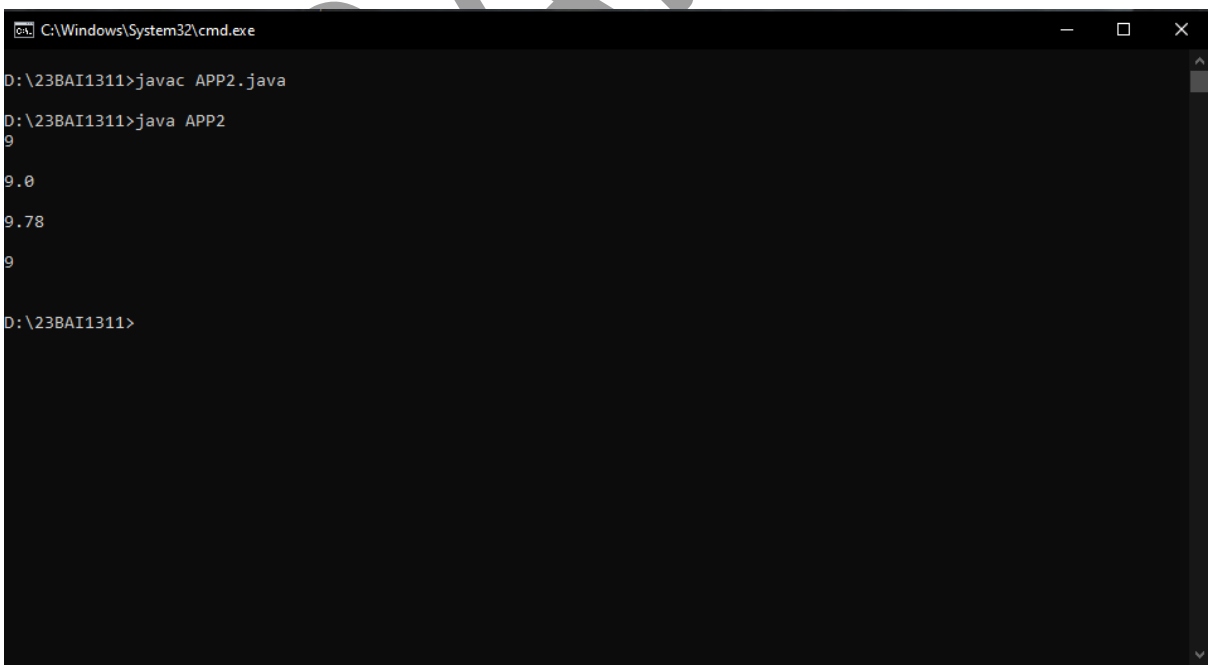
16/07/2024

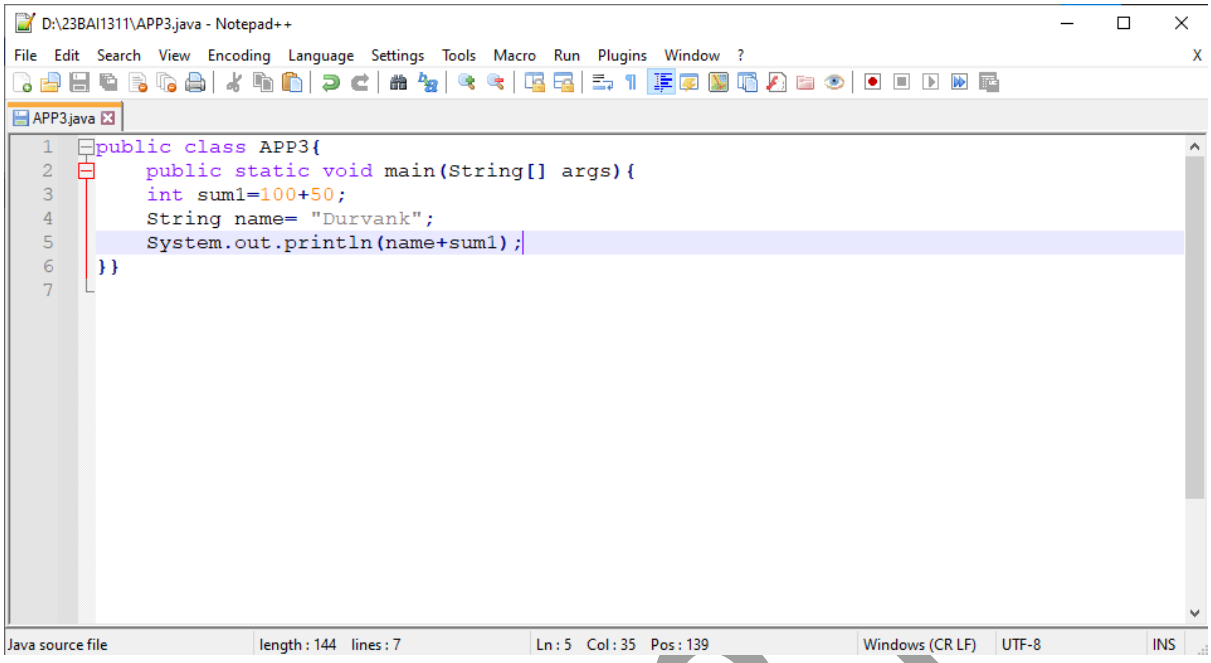


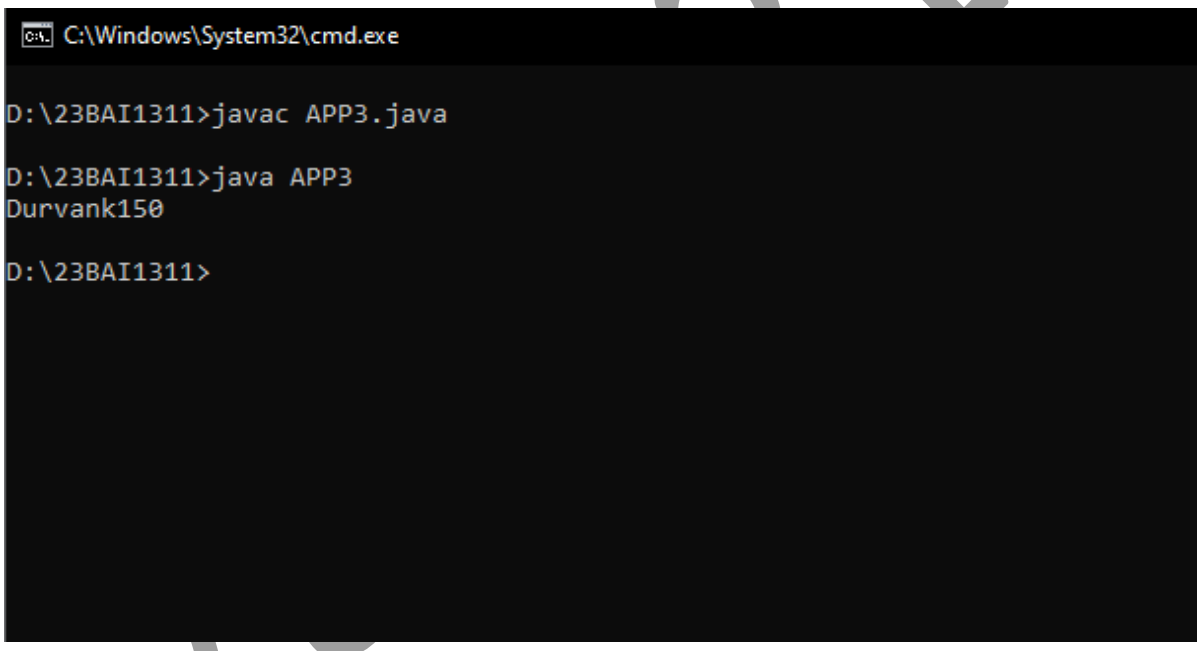


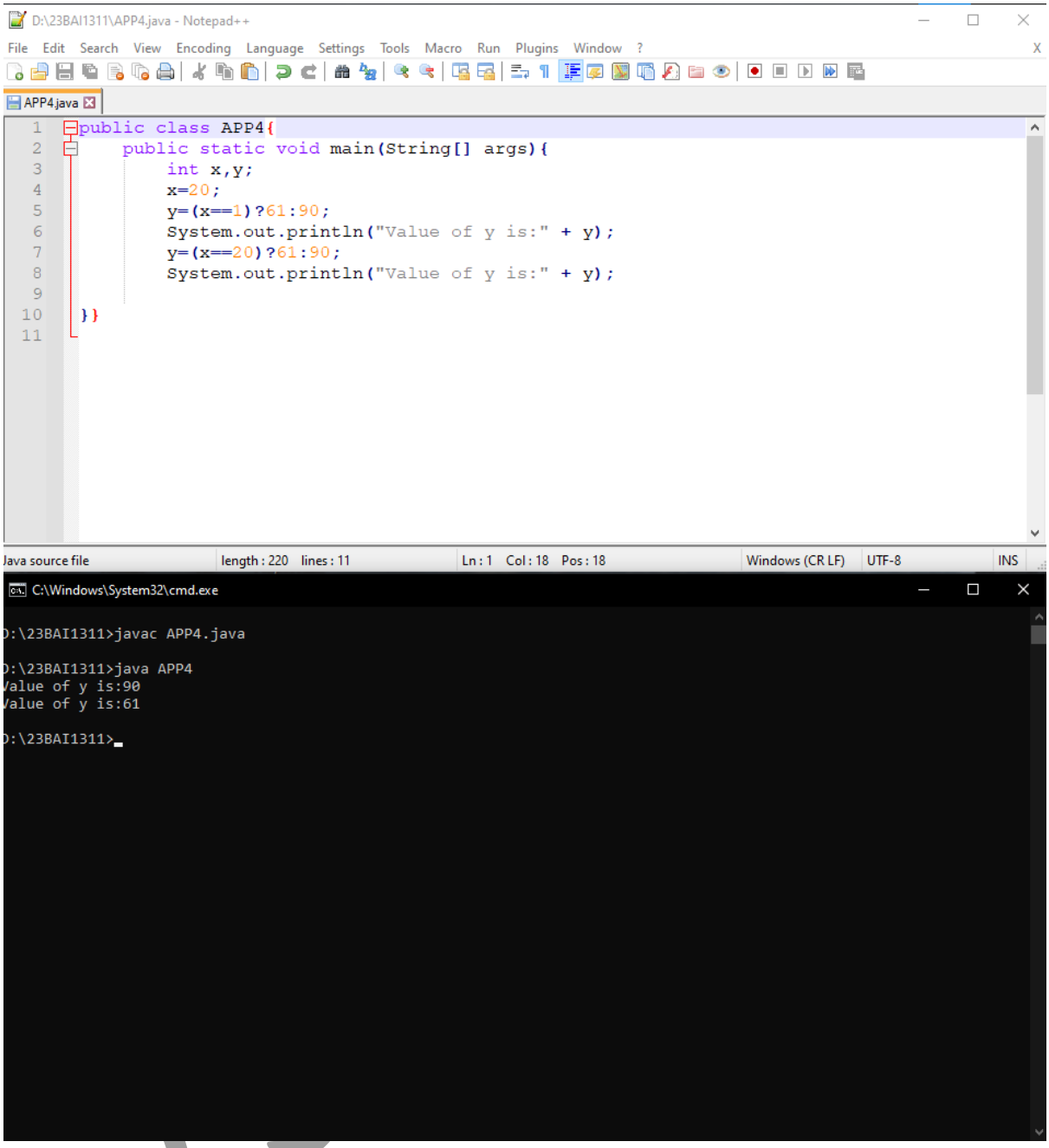
18/07/2024

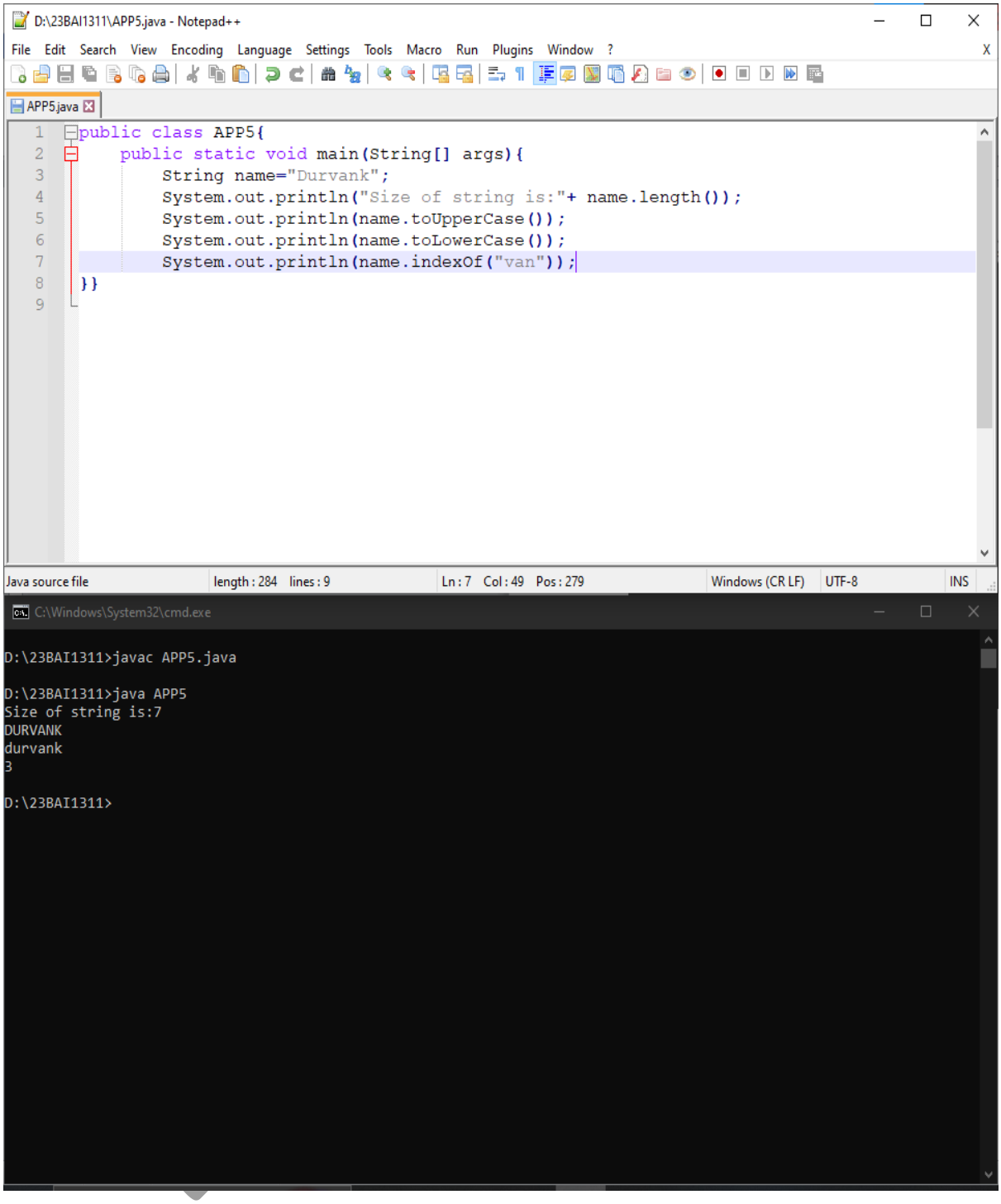

D:\23BAI1311\APP2.java - Notepad++
File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
APP2.java
1 public class APP2{
2 public static void main(String[] args){
3 int myint=9;
4 double mydouble=myint;
5 //Widening Casting
6 System.out.println(myint+"\n");
7 System.out.println(mydouble+"\n");
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>

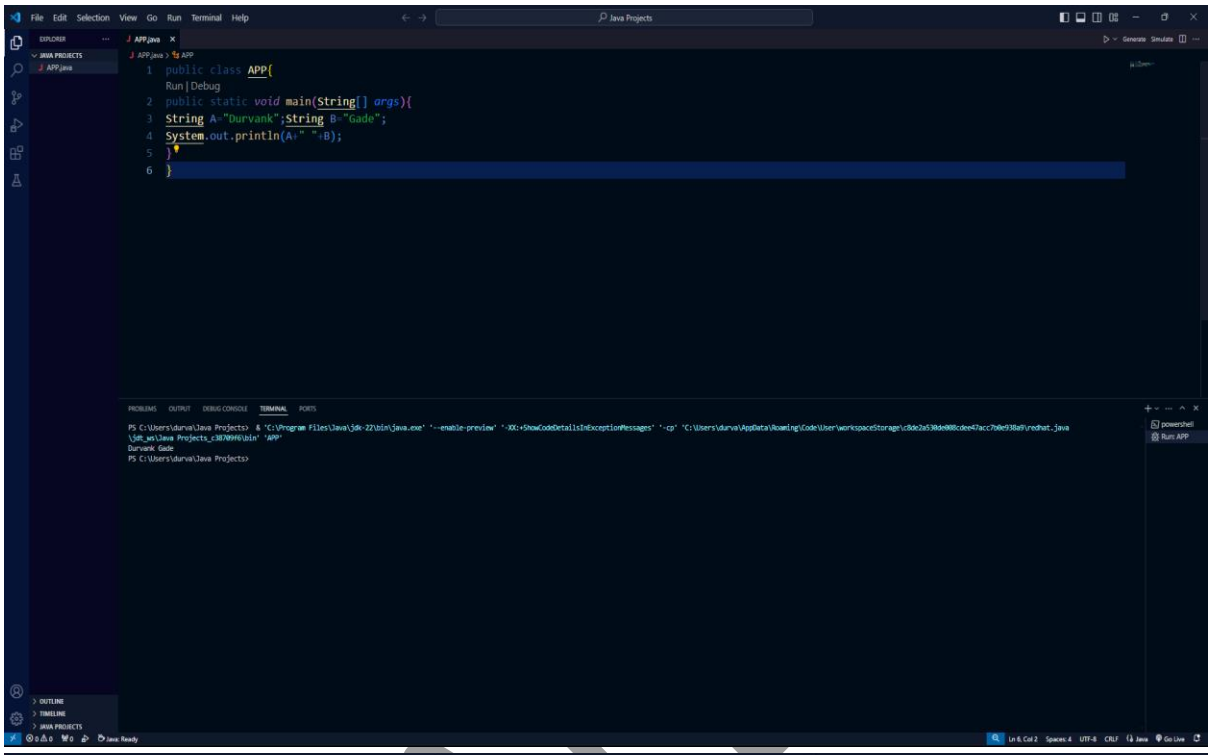

D:\23BAI1311\APP3.java - Notepad++
File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
APP3.java
1 public class APP3{
2 public static void main(String[] args){
3 int sum1=100+50;
4 String name= "Durvank";
5 System.out.println(name+sum1);
6 }}
7
Java source file
length : 144 lines : 7
Ln : 5 Col : 35 Pos : 139
Windows (CR LF)
UTF-8
INS

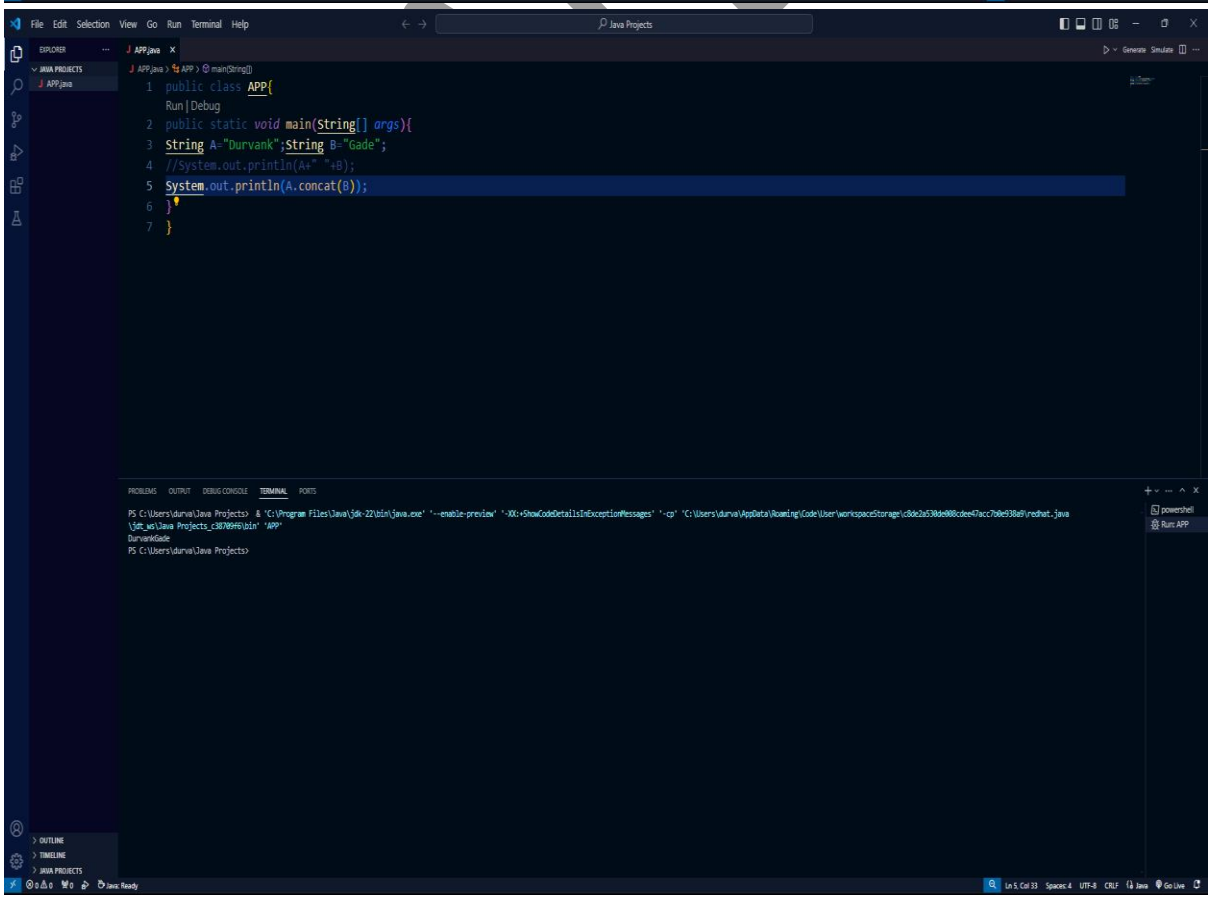

C:\Windows\System32\cmd.exe
D:\23BAI1311>javac APP3.java
D:\23BAI1311>java APP3
Durvank150
D:\23BAI1311>

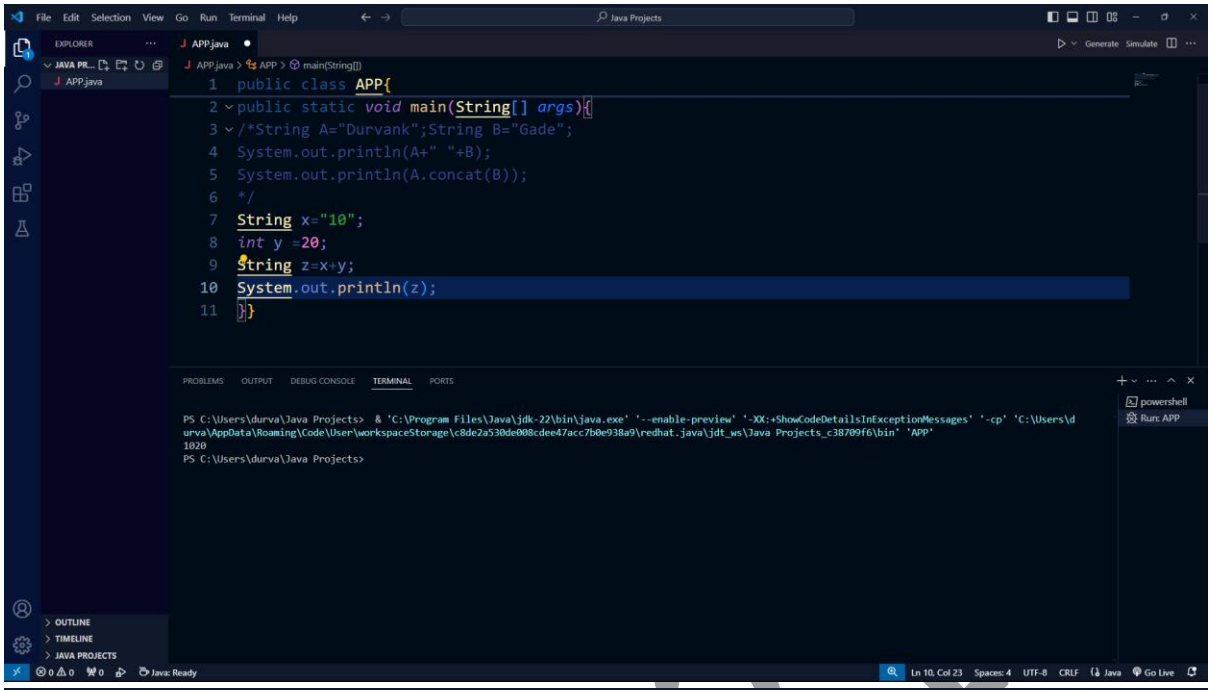

D:\23BAI1311\APP4.java - Notepad++
File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
APP4.java
1 public class APP4{
2 public static void main(String[] args){
3 int x,y;
4 x=20;
5 y=(x==1)?61:90;
6 System.out.println("Value of y is:" + y);
7 y=(x==20)?61:90;
8 System.out.println("Value 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>

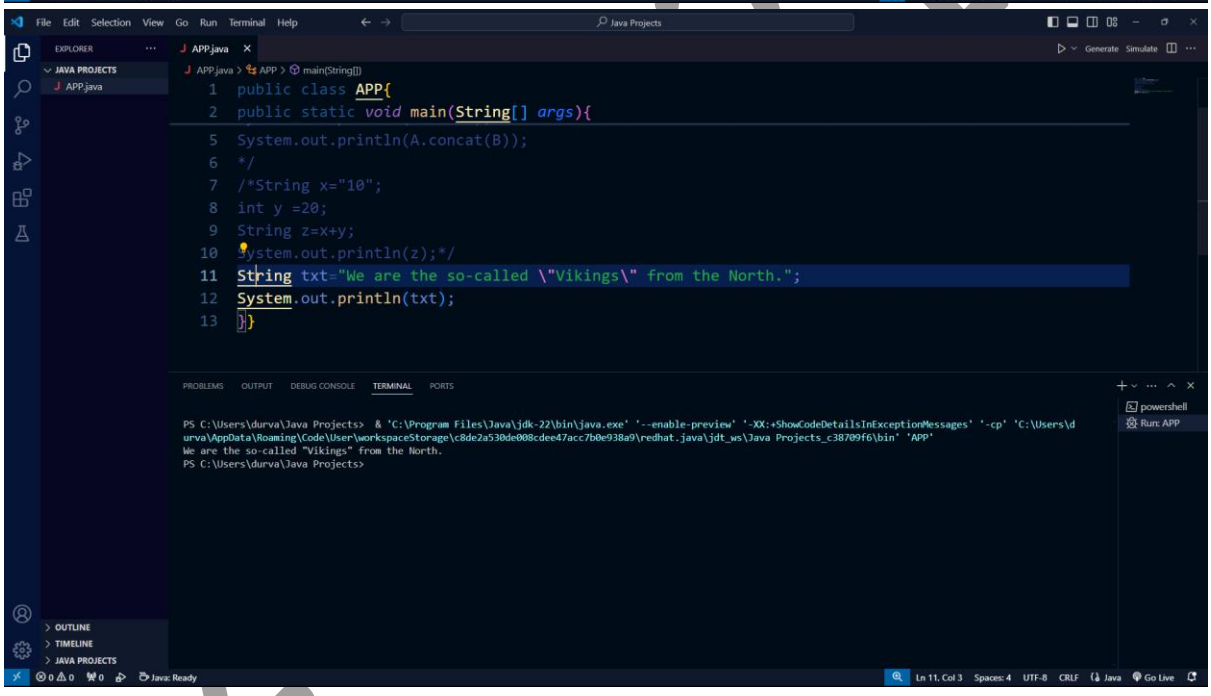

D:\23BAI1311\APP5.java - Notepad++
File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
APP5.java
1 public class APP5{
2 public static void main(String[] args){
3 String name="Durvank";
4 System.out.println("Size of string is:"+ name.length());
5 System.out.println(name.toUpperCase());
6 System.out.println(name.toLowerCase());
7 System.out.println(name.indexOf("van"));
8 }}
9
Java source file length : 284 lines : 9 Ln : 7 Col : 49 Pos : 279 Windows (CR LF) UTF-8 INS
C:\Windows\System32\cmd.exe
D:\23BAI1311>javac APP5.java
D:\23BAI1311>java APP5
Size of string is:7
DURVANK
durvank
3
D:\23BAI1311>

22/07/2024


File Edit Selection View Go Run Terminal Help
Java Projects
APP.java
public class APP{
Run | Debug
public static void main(String[] args){
String A="Durvank";String B="Gade";
System.out.println(A+" "+B);
}
}
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
PS C:\Users\durva\Java Projects> & 'C:\Program Files\Java\jdk-22\bin\java.exe' '--enable-preview' '-XX:+ShowCodeDetailsInExceptionMessages' '-cp' 'C:\Users\durva\AppData\Roaming\Code\User\workspaceStorage\c8de2a530de008cdee47acc7b8e938e9\redhat.java
\jdt_ws\Java Projects_c38709f6\bin' 'APP'
Durvank Gade
PS C:\Users\durva\Java Projects>


File Edit Selection View Go Run Terminal Help
Java Projects
APP.java
public class APP{
Run | Debug
public static void main(String[] args){
String A="Durvank";String B="Gade";
//System.out.println(A+" "+B);
System.out.println(A.concat(B));
}
}
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
PS C:\Users\durva\Java Projects> & 'C:\Program Files\Java\jdk-22\bin\java.exe' '--enable-preview' '-XX:+ShowCodeDetailsInExceptionMessages' '-cp' 'C:\Users\durva\AppData\Roaming\Code\User\workspaceStorage\c8de2a530de008cdee47acc7b8e938e9\redhat.java
\jdt_ws\Java Projects_c38709f6\bin' 'APP'
DurvankGade
PS C:\Users\durva\Java Projects>


File Edit Selection View Go Run Terminal Help
Java Projects
APP.java
public class APP{
public static void main(String[] args){
/*String A="Durvank";String B="Gade";
System.out.println(A+" "+B);
System.out.println(A.concat(B));
*/
String x="10";
int y =20;
String z=x+y;
System.out.println(z);
}}
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
PS C:\Users\durva\Java Projects> & 'C:\Program Files\Java\jdk-22\bin\java.exe' '--enable-preview' '-XX:+ShowCodeDetailsInExceptionMessages' '-cp' 'C:\Users\durva\AppData\Roaming\Code\User\workspaceStorage\c8de2a530de008cdee47acc7b0e938a9\redhat.java\jdt_ws\Java Projects_c38709f6\bin' 'APP'
1020
PS C:\Users\durva\Java Projects>
powershell
Run: APP
OUTLINE
TIMELINE
JAVA PROJECTS
Java: Ready
Ln 10, Col 23 Spaces: 4 UTF-8 CRLF Java Go Live

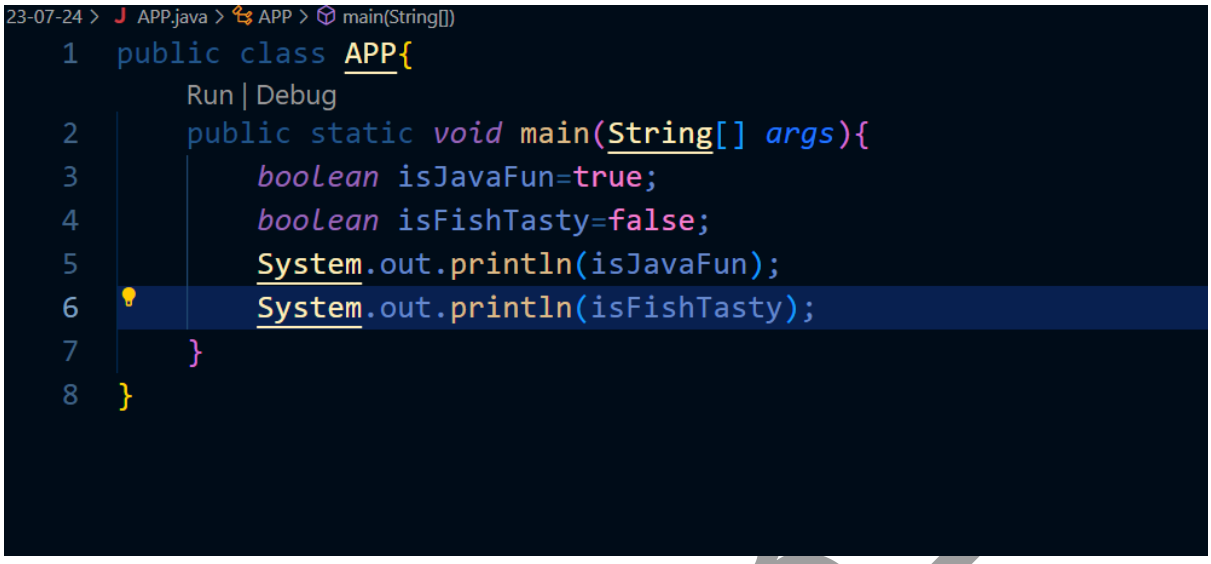

File Edit Selection View Go Run Terminal Help
Java Projects
APP.java
public class APP{
public static void main(String[] args){
System.out.println(A.concat(B));
*/
/*String x="10";
int y =20;
String z=x+y;
System.out.println(z);*/
String txt="We are the so-called \"Vikings\" from the North.";
System.out.println(txt);
}}
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
PS C:\Users\durva\Java Projects> & 'C:\Program Files\Java\jdk-22\bin\java.exe' '--enable-preview' '-XX:+ShowCodeDetailsInExceptionMessages' '-cp' 'C:\Users\durva\AppData\Roaming\Code\User\workspaceStorage\c8de2a530de008cdee47acc7b0e938a9\redhat.java\jdt_ws\Java Projects_c38709f6\bin' 'APP'
We are the so-called "Vikings" from the North.
PS C:\Users\durva\Java Projects>
powershell
Run: APP
OUTLINE
TIMELINE
JAVA PROJECTS
Java: Ready
Ln 11, Col 3 Spaces: 4 UTF-8 CRLF Java Go Live

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

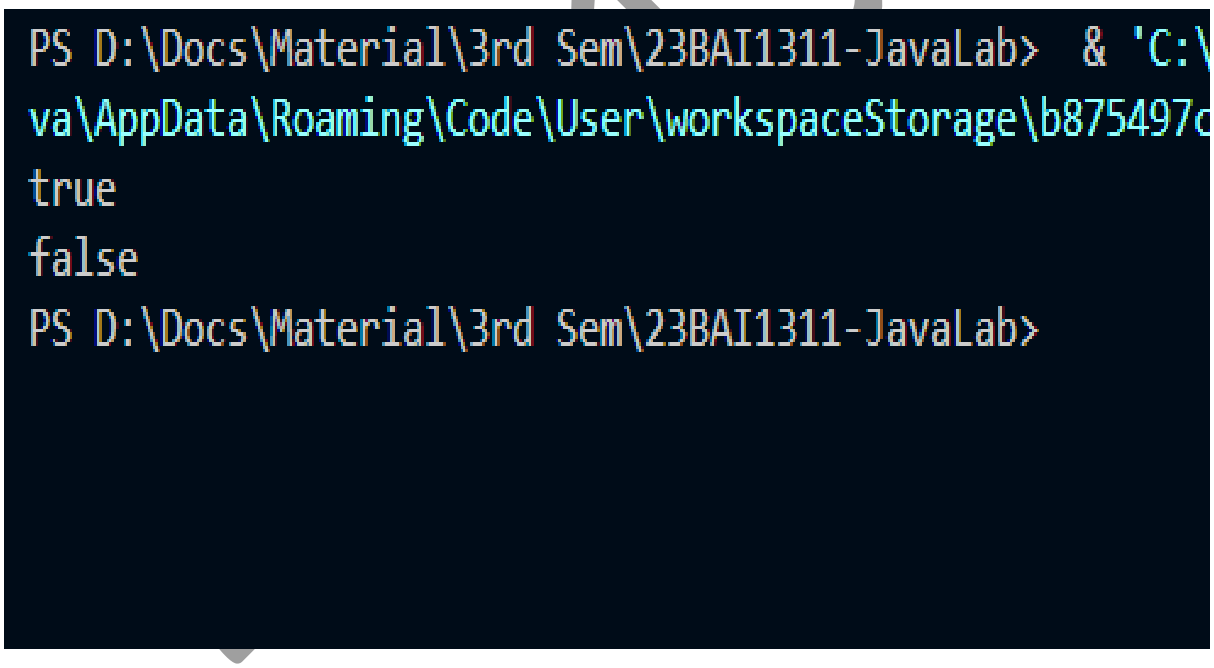
```
PS C:\Users\durva> & 'C:\Program Files\Java\jdk-22\bin\java.exe' '--enable-preview' '-XX:+ShowCodeDetailsInExceptionMessages' '-cp' 'C:\Users\durva\AppData\Local\Temp\vscodesws_6dab0\jdt_ws\jdt.ls-java-project\bin' 'APP2'
10
5
8.0
4.7
0.6066473127902583
PS C:\Users\durva>
```

23/07/24

Program 1:



Output:



Program 2:

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

Output:

```
PS D:\Docs\Material\3rd Sem\23BAI1311-JavaLab>  & 'C
va\AppData\Roaming\Code\User\workspaceStorage\b87549
true
PS D:\Docs\Material\3rd Sem\23BAI1311-JavaLab>
```

Program 3:

```
public class APP2307b {
    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:\Pro
p' 'C:\Users\durva\AppData\Roaming\Code\User\workspaceSto
20m is greater than 18
PS D:\Docs\Material\3rd Sem\23BAI1311-JavaLab>
```

Program 4:

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

Program 5:

```java
public class APP2307b {
    public static void main(String[] Args){

        int day=4;
        switch (day) {
            case 1:
                System.out.println(x:"Monday");
                break;
            case 2:
            System.out.println(x:"Tuesday");
            break;
            case 3:
            System.out.println(x:"Wednesday");
            break;
            case 4:
            System.out.println(x:"Thursday");
            break;
            case 5:
            System.out.println(x:"Friday");
            break;
            case 6:
            System.out.println(x:"Sat");
            break;
            case 7:
            System.out.println(x:"Sunday");
            break;
            default:
            System.out.println(x:"Invalid");
            break;
        }
    }
}
```

Output:

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

Program 7:

```java
public class APP2307c {
    Run | Debug
    public static void main(String[] args){
        int i = 0;
        while(i<5){
            System.out.println(i);
            i++;
        }
    }
}
```

Output:

```
va\AppData\Roaming\Code\User\workspaceStorage\b8
0
1
2
3
4
```

Program 8:

```java
        int i=0;
        do{
            System.out.println(i);
            i++;
        }
        while(i<5);
```

Output:

```
va\AppData\Roaming\Code\User\workspaceStorage\b875497c60bbd44b8
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 ,
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:

```java
public class APP2307c {
    public static void main(String[] args){
        }
        */
        for(int i=0;i<10;i++){
            if(i==4){
                continue;
            }
            System.out.println(i);
        }

        }
    }

```

Output:

```
0
1
2
3
5
6
7
8
9
```

Program 12:

```java
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
```

25/07/2024

Program 1:

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

Output:

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

Program 2:

```java
import java.util.Scanner;
public class Calculator{
    Run | Debug
    public static void main(String[] args){
        int operandA, operandB; int i=0;
        String operation;
        String loop;
        String add="ADD";
        String sub="SUB";
        String mul="MULTIPLY";
        String div="DIVIDE";
        String cont="YES";
        String end="NO";
        Scanner n = new Scanner(System.in);
        while(i<=0){
        System.out.println(x:"Enter the arithmetic operation you need to perform:\n1.ADD\n2.SUB\n3
        operation = n.nextLine();
        System.out.println(x:"Enter Operand 1");
        operandA = n.nextInt();
        System.out.println(x:"Enter Operand 2");
        operandB = n.nextInt();
        n.nextLine();
        if(operation.equals(add)){
            System.out.println(operandA+operandB);
        }
```

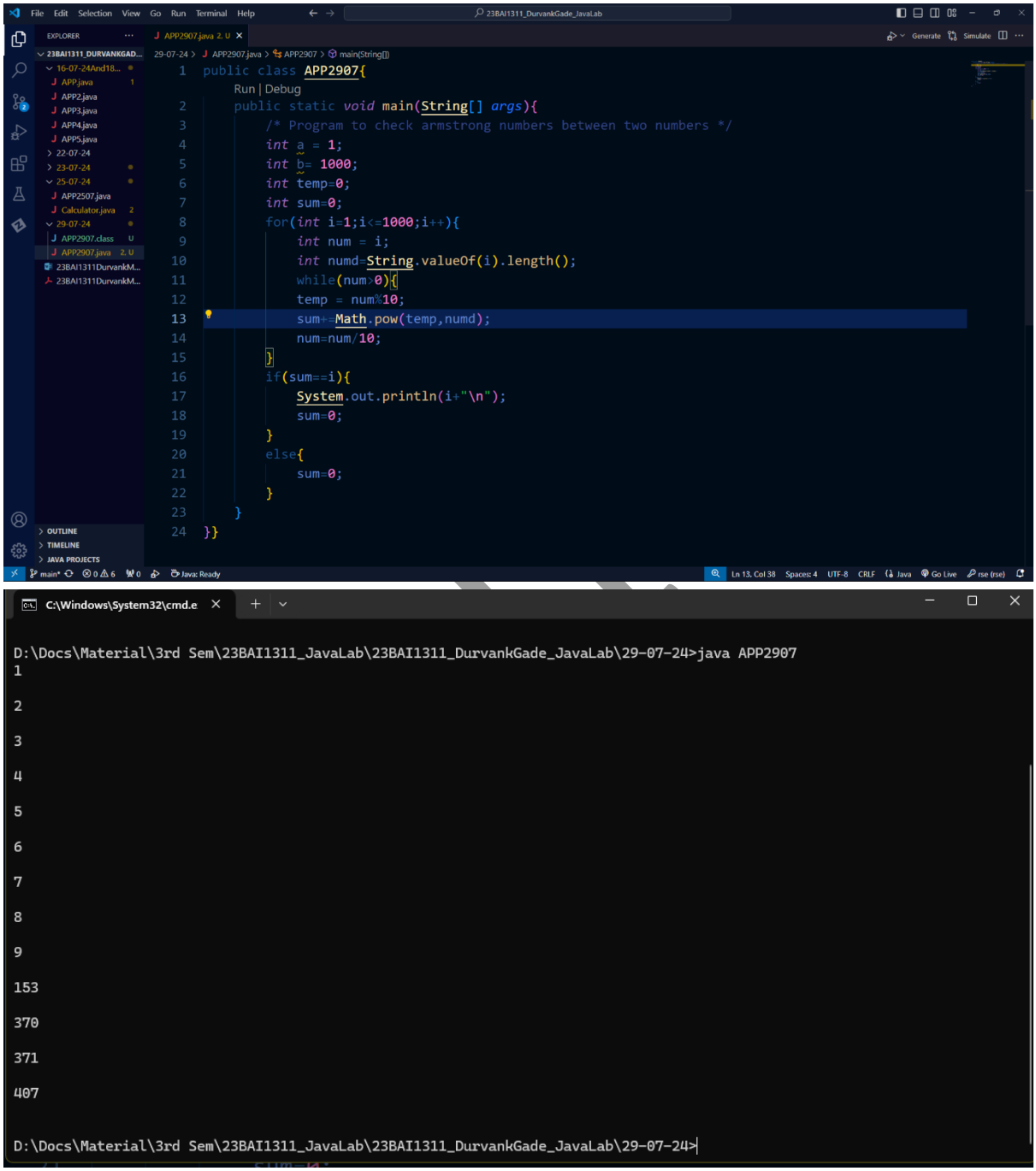
```
        else if(operation.equals(sub)){
            System.out.println(operandA-operandB);
        }
        else if(operation.equals(mul)){
            System.out.println(operandA*operandB);
        }
        else if(operation.equals(div)){
            System.out.println(operandA/operandB);
        }

        System.out.println(x:"YES to continue or NO to exit: ");
        loop = n.nextLine();
        if(loop.equals(cont)){
            continue;
        }
        else{
            break;
        }
        }
        }
}
```

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>
```

29/07/2024

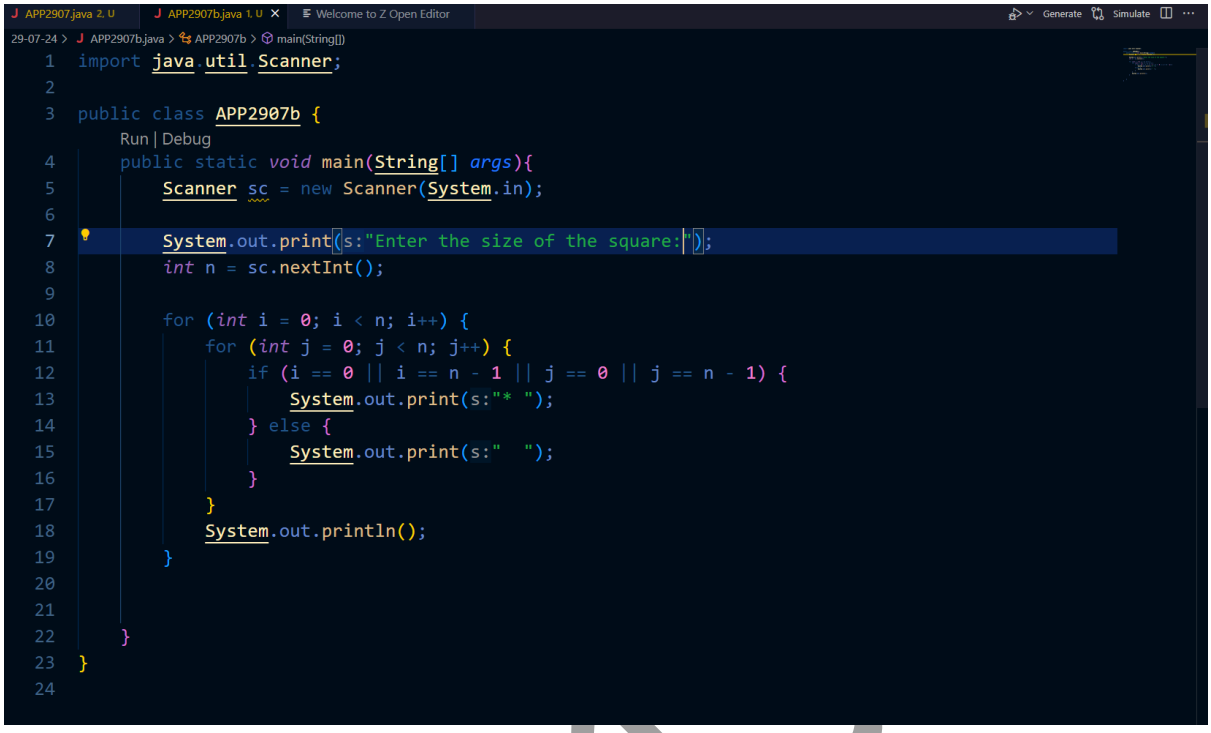
Program 1:



```
public class APP2907{
    Run | Debug
    public static void main(String[] args){
        /* Program to check armstrong numbers between two numbers */
        int a = 1;
        int b= 1000;
        int temp=0;
        int sum=0;
        for(int i=1;i<=1000;i++){
            int num = i;
            int numd=String.valueOf(i).length();
            while(num>0){
            temp = num%10;
            sum+=Math.pow(temp,numd);
            num=num/10;
            }
            if(sum==i){
                System.out.println(i+"\n");
                sum=0;
            }
            else{
                sum=0;
            }
        }
}}
```

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

D:\Docs\Material\3rd Sem\23BAI1311_JavaLab\23BAI1311_DurvankGade_JavaLab\29-07-24>java APP2907
1

2

3

4

5

6

7

8

9

153

370

371

407

D:\Docs\Material\3rd Sem\23BAI1311_JavaLab\23BAI1311_DurvankGade_JavaLab\29-07-24>
```

Program 2:



```java
import java.util.Scanner;

public class APP2907b {
    Run | Debug
    public static void main(String[] args){
        Scanner sc = new Scanner(System.in);

        System.out.print("Enter the size of the square:");
        int n = sc.nextInt();

        for (int i = 0; i < n; i++) {
            for (int j = 0; j < n; j++) {
                if (i == 0 || i == n - 1 || j == 0 || j == n - 1) {
                    System.out.print("* ");
                } else {
                    System.out.print("  ");
                }
            }
            System.out.println();
        }


    }
}

```

```
nMessages' '-cp' 'C:\Users\durva\AppData\Roaming\Code\User\workspaceStorage\f65921732f04d9ea3e21c058
PP2907b'
Enter the size of the square:6
* * * * * *
*         *
*         *
*         *
*         *
* * * * * *
PS D:\Docs\Material\3rd Sem\23BAI1311_JavaLab\23BAI1311_DurvankGade_JavaLab>
```

Program 3:

```java
import java.util.Scanner;
public class APP2907c{
    Run | Debug
    public static void main(String[] args){
    Scanner sc = new Scanner(System.in);
    System.out.println(x:"Enter the first number: ");
    int a = sc.nextInt();
    System.out.println(x:"Enter the second number: ");
    int b = sc.nextInt();
    int lcm = (a > b) ? a : b;
    while (true) {
        if (lcm % a == 0 && lcm % b == 0) {
            System.out.println("The LCM of " + a + " and " + b + " is " + lcm);
            break;
        }
        lcm++;
    }
    }
}
```

```
Enter the first number:
12
Enter the second number:
64
The LCM of 12 and 64 is 192
PS D:\Docs\Material\3rd Sem\23BAI1311_JavaLab\23BAI1311_DurvankGade_JavaLab>
```

30/07/2024

Program 1:

```java
public class APP3007{
    Run | Debug
    public static void main(String[] args) {
        StringBuffer sb=new StringBuffer(str:"Hello");
        sb.append(str:"Java");
        System.out.println(sb);
    }
}
```

```
D:\23BAI1311\30-07-24>java APP3007
HelloJava

D:\23BAI1311\30-07-24>
```

Program 2:

```
    sb.replace(start:1,end:3,str:"Java");
    System.out.println(sb);
```

```
D:\23BAI1311\30-07-24>javac APP3007.java

D:\23BAI1311\30-07-24>java APP3007
HJavalo
```

Program 3:

```
    StringBuffer sb=new StringBuffer(str:"Hello");
    sb.delete(start:1, end:3);
    System.out.println(sb);
```

Output:

```
D:\23BAI1311\30-07-24>javac APP3007.java

D:\23BAI1311\30-07-24>java APP3007
Hlo
```

Program 4:

```
StringBuffer sb=new StringBuffer(str:"Hello");
sb.reverse();
System.err.println(sb);
```

Output:

```
D:\23BAI1311\30-07-24>java APP3007
olleH

D:\23BAI1311\30-07-24>
```

Program 5:

```
public class APP3007b {
    Run | Debug
    public static void main(String[] args) {
    StringBuffer sb=new StringBuffer();
    System.out.println(sb.capacity());
    sb.append(str:"Hello");
    System.out.println(sb.capacity());
    sb.append(str:" Java is my favorite language");
    System.out.println(sb.capacity());
}}
```

Output:

```
D:\23BAI1311\30-07-24>java APP3007b
16
16
34
```

Program 6:

```java
public class APP3007b {
    Run | Debug
    public static void main(String[] args) {
    StringBuffer sb=new StringBuffer();
    System.out.println(sb.capacity());
    sb.append(str:"Hello");
    System.out.println(sb.capacity());
    sb.append(str:" Java is my favorite language");
    System.out.println(sb.capacity());
    sb.ensureCapacity(minimumCapacity:10);
    System.out.println(sb.capacity());
    sb.ensureCapacity(minimumCapacity:50);
    System.out.println(sb.capacity());
}}
```

Output:

```
D:\23BAI1311\30-07-24>javac APP3007b.java

D:\23BAI1311\30-07-24>java APP3007b
16
16
34
34
70
```

Program 7:

```java
public class APP3007c {
    Run | Debug
    public static void main(String[] args) {
        StringBuilder sb=new StringBuilder(str:"Hello");
        sb.append(str:"Java");
        System.out.println(sb);
    }
}
```

Output:

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

D:\23BAI1311\30-07-24>javac APP3007c.java

D:\23BAI1311\30-07-24>java APP3007c
HelloJava

D:\23BAI1311\30-07-24>
```

Program 8:

```java
StringBuilder sb=new StringBuilder(str:"Hello");
sb.replace(start:1,end:3,str:"Java");
System.out.println(sb);
```

Output:

```
D:\23BAI1311\30-07-24>javac APP3007c.java

D:\23BAI1311\30-07-24>java APP3007c
HJavalo
```

Program 9:

```java
StringBuilder sb=new StringBuilder(str:"Hello");
sb.delete(start:1, end:3);
System.out.println(sb);
```

Output:

```
D:\23BAI1311\30-07-24>javac APP3007c.java

D:\23BAI1311\30-07-24>java APP3007c
Hlo

D:\23BAI1311\30-07-24>
```

Program 10:

```java
StringBuilder sb=new StringBuilder(str:"Hello");
sb.reverse();
System.err.println(sb);
```

Output:

```
D:\23BAI1311\30-07-24>javac APP3007c.java

D:\23BAI1311\30-07-24>java APP3007c
olleH
```

Program 11:

```java
    StringBuilder sb=new StringBuilder();
    System.out.println(sb.capacity());
    sb.append(str:"Hello");
    System.out.println(sb.capacity());
    sb.append(str:" Java is my favorite language");
    System.out.println(sb.capacity());
    sb.ensureCapacity(minimumCapacity:10);
    System.out.println(sb.capacity());
    sb.ensureCapacity(minimumCapacity:50);
    System.out.println(sb.capacity());
```

Output:

```
D:\23BAI1311\30-07-24>javac APP3007c.java

D:\23BAI1311\30-07-24>java APP3007c
16
16
34
34
70

D:\23BAI1311\30-07-24>
```

Program 12:

```java
import java.util.Scanner;
public class APP3007d {
Run | Debug
public static void main(String[] args) {
    int temp=0;int temp2;
    Scanner myobj=new Scanner(System.in);
    System.out.println(x:"Enter number of elements in array:");
    int n= myobj.nextInt();
    int[] arr=new int[n];
    for (int k=0;k<n;k++){
        arr[k]=myobj.nextInt();
    }


    for (int i=0;i<arr.length;i++){
        for (int j=i+1;j<arr.length;j++){
            if(arr[i]<arr[j]){
                temp=arr[i];
                arr[i]=arr[j];
                arr[j]=temp;
            }
            else{
                continue;
            }
        }
    }
    System.out.println(arr[2]);
}
}

```

Output:

```
D:\23BAI1311\30-07-24>javac APP3007d.java

D:\23BAI1311\30-07-24>java APP3007d
Enter number of elements in array:
5
12
13
14
15
16
14
```

1/08/2024

Program 1:

```java
import java.util.StringTokenizer;
public class APP108{
    Run | Debug
public static void main(String[] args) {
  StringTokenizer st=new StringTokenizer(str:"My name is Durvank",delim:" ");
  while(st.hasMoreTokens()){
    System.out.println(st.nextToken());
  }
}}
```

Output:

```
D:\23BAI1311\1-08-24>javac APP108.java

D:\23BAI1311\1-08-24>java APP108
My
name
is
Durvank
```

Program 2:

```java
import java.util.*;
public class APP108b {
    Run | Debug
    public static void main(String[] args) {
        StringTokenizer st=new StringTokenizer(str:"My name,is,Durvank,");
        System.out.println("next token is:" + st.nextToken(delim:","));
    }
}
```

Output:

```
D:\23BAI1311\1-08-24>java APP108b
next token is:My name
```

Program 3:

```
StringTokenizer st=new StringTokenizer(str:"My name is Durvank. I am  a Second year student pursuing B.Tech in AI ML at VIT Chennai. ",delim:" ");
while(st.hasMoreTokens()){
  System.out.println(st.nextToken());
```

Output:

```
D:\23BAI1311\1-08-24>java APP108
My
name
is
Durvank.
I
am
a
Second
year
student
pursuing
B.Tech
in
AI
ML
at
VIT
Chennai.
```

Program 4:

```
  StringTokenizer st=new StringTokenizer(str:"My name is Durvank",delim:" ");
 while(st.hasMoreElements()){
   System.out.println(st.nextToken());
```

Output:

```
D:\23BAI1311\1-08-24>java APP108
My
name
is
Durvank
```

Program 5:

```
   StringTokenizer st=new StringTokenizer(str:"My name is Durvank",delim:" ");
 while(st.hasMoreTokens()){
   System.out.println(st.nextElement());
```

Output:

```
D:\23BAI1311\1-08-24>java APP108
My
name
is
Durvank
```

Program 6:

```
 StringTokenizer st=new StringTokenizer(str:"My name is Durvank",delim:" ");
 System.out.println("Total number of tokens: "+st.countTokens());
```

Output:

```
D:\23BAI1311\1-08-24>java APP108
Total number of tokens: 4
```

Program 7:

```
import java.util.*;
public class APP108c {
    Run | Debug
    public static void main(String[] args) {
        int[] arr;
         arr = new int[5];
         arr[0]=10;
         arr[1]=20;
         arr[2]=30;
         arr[3]=40;
         arr[4]=50;
         for(int i=0;i<arr.length;i++){
            System.out.println("Elements at index "+ i  + ": " +arr[i]);
         }
    }
}
```

Output:

```
D:\23BAI1311\1-08-24>javac APP108c.java

D:\23BAI1311\1-08-24>java APP108c
Elements at index 0: 10
Elements at index 1: 20
Elements at index 2: 30
Elements at index 3: 40
Elements at index 4: 50
```

Program 8:

```
class Student {
public int roll_no;
public String Name;
Student(int roll_no,String Name){
    this.roll_no=roll_no;
    this.Name=Name;

}
}
public class APP108d{
    Run | Debug
    public static void main(String[] args) {
        Student arr[];
        arr=new Student[5];
        arr[0]=new
        arr[1]=new
        arr[2]=new Student(roll_no:3,Name:"Dinsha");
        arr[3]=new Student(roll_no:4,Name:"Rajat");
        arr[4]=new Student(roll_no:5,Name:"Durvank");

        for(int i=0; i<arr.length;i++){
            System.out.println("Roll number: "+ arr[i].roll_no + " Name " + arr[i].Name);
        }
    }
}
```

Student.Student(int roll_no, String Name)

Output:

```
D:\23BAI1311\1-08-24>javac APP108d.java

D:\23BAI1311\1-08-24>java APP108d
Roll number: 1 Name Aman
Roll number: 2 Name Nimish
Roll number: 3 Name Dinsha
Roll number: 4 Name Rajat
Roll number: 5 Name Durvank
```