



Institute of Computer Engineering Technology

iCD iCET Certified Developer

ASSIGNMENT

Assignment	Programming Fundamentals
Batch No	iCD 113
Name	Typing Practice
Ass. Date	05th August 2024

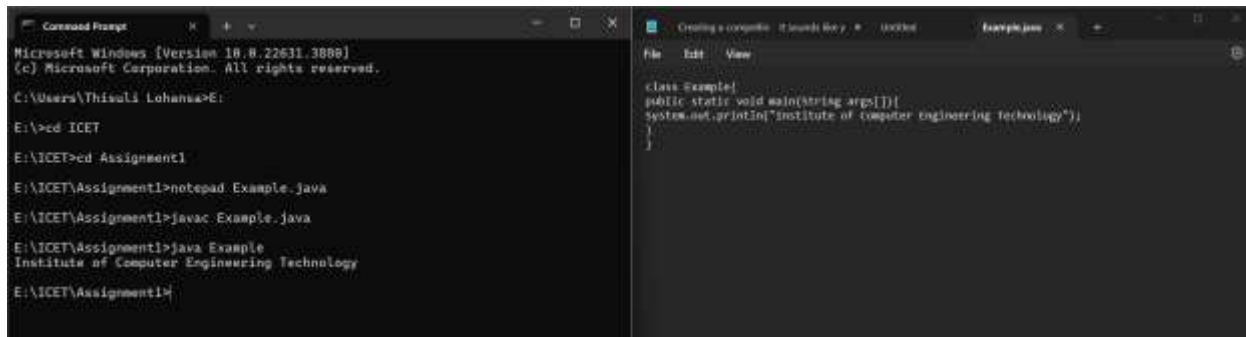
PR2411302 Thisuli Lohansa

Q1.

```
class Example {  
    public static void main(String args[]){  
        System.out.println("Institute of Computer Engineering Technology");  
    }  
}
```

//- Output

E:\ICET\Assignment1>java Example
Institute of Computer Engineering Technology

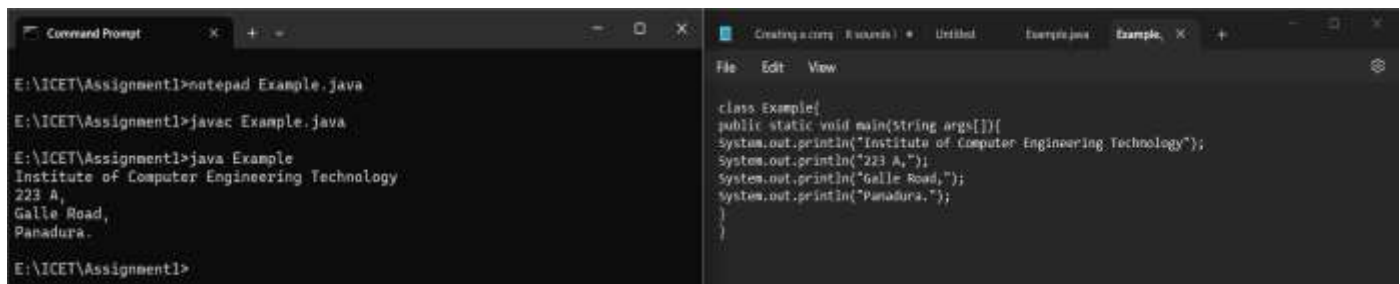


Q2.

```
class Example {  
    public static void main(String args[]){  
        System.out.println("Institute of Computer Engineering Technology");  
        System.out.println("223 A,");  
        System.out.println("Galle Road,");  
        System.out.println("Panadura");  
    }  
}
```

//- Output

E:\ICET\Assignment1>java Example
Institute of Computer Engineering Technology
223 A,
Galle Road,
Panadura.

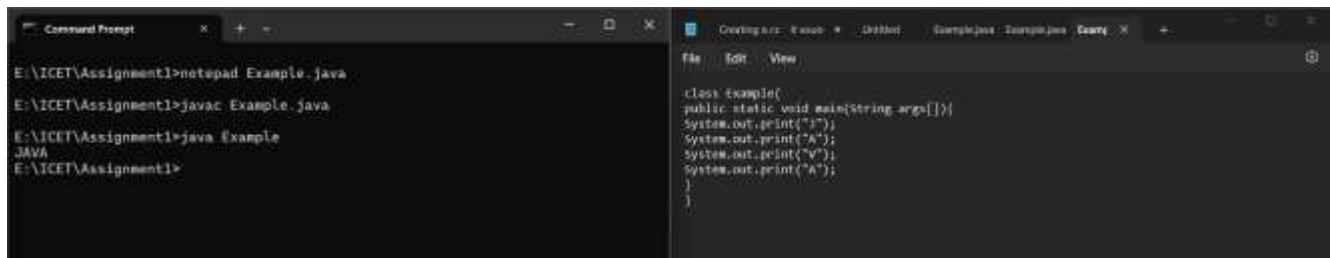


Q3.

```
class Example{  
    public static void main(String args[]){  
        System.out.print("J");  
        System.out.print("A");  
        System.out.print("V");  
        System.out.print("A");  
    }  
}
```

//- Output

```
E:\ICET\Assignment1>java Example  
JAVA
```

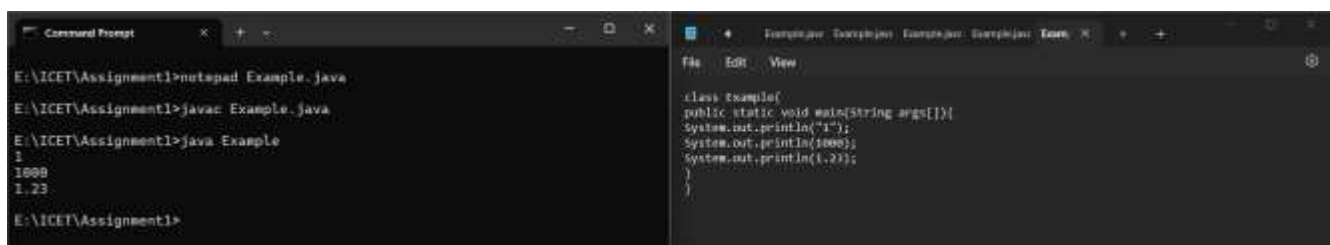


Q4.

```
class Example{  
    public static void main(String args[]){  
        System.out.println("1");  
        System.out.println(1000);  
        System.out.println(1.23);  
    }  
}
```

//- Output

```
E:\ICET\Assignment1>java Example  
1  
1000  
1.23
```



Q5.

```
class Example{  
    public static void main(String args[]){  
        System.out.println("Hello");  
        System.out.println("A");  
        System.out.println(1234);  
        System.out.println(-1234);  
        System.out.println(1.2334);  
        System.out.println(0.0032);  
        System.out.println(-1234);  
        System.out.println('A');  
        System.out.println('6');  
        System.out.println(True);  
        System.out.println(false);  
    }  
}
```

//- Output

E:\ICET\Assignment1>java Example

Hello

A

1234

-1234

1.2334

0.0032

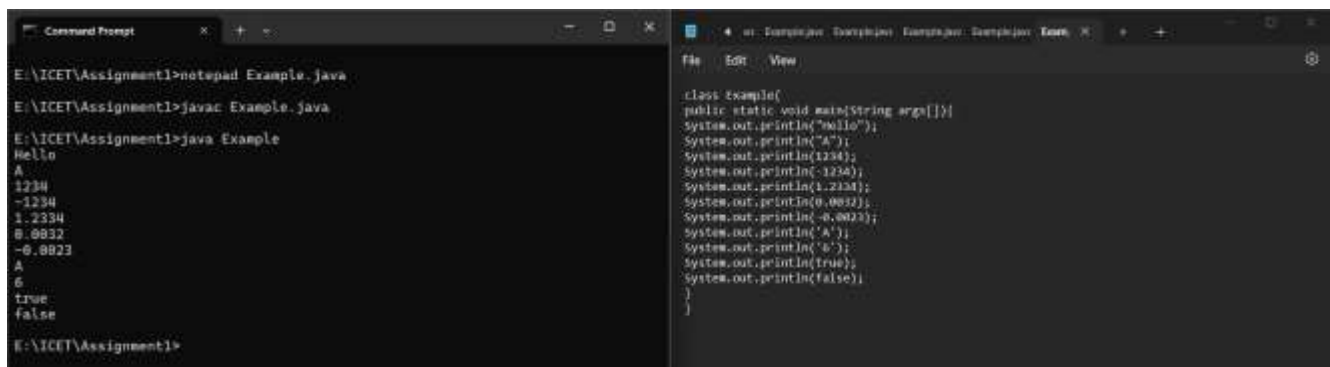
-0.0023

A

6

true

false



The screenshot displays two windows side-by-side. The left window is a Command Prompt titled 'Command Prompt' with the following text:

```
E:\ICET\Assignment1>notepad Example.java  
E:\ICET\Assignment1>javac Example.java  
E:\ICET\Assignment1>java Example  
Hello  
A  
1234  
-1234  
1.2334  
0.0032  
-0.0023  
A  
6  
true  
false  
E:\ICET\Assignment1>
```

The right window is an IDE titled 'Example.java' showing the following code:

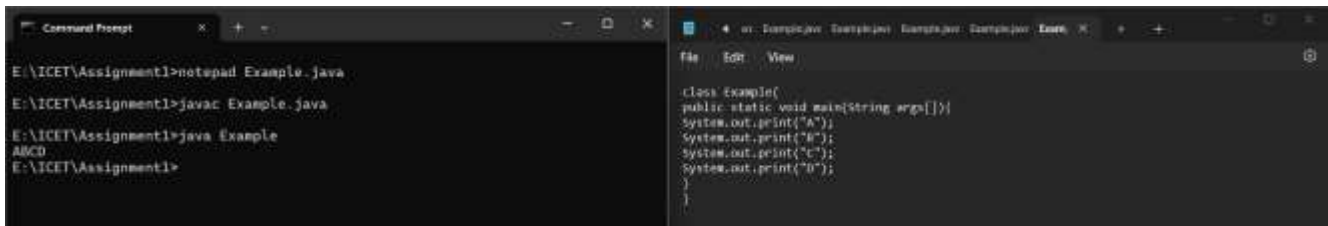
```
class Example{  
    public static void main(String args[]){  
        System.out.println("Hello");  
        System.out.println("A");  
        System.out.println(1234);  
        System.out.println(-1234);  
        System.out.println(1.2334);  
        System.out.println(0.0032);  
        System.out.println(-0.0023);  
        System.out.println('A');  
        System.out.println('6');  
        System.out.println(true);  
        System.out.println(false);  
    }  
}
```

Q6.

```
class Example{  
    public static void main(String args[]){  
        System.out.print("A");  
        System.out.print("B");  
        System.out.print("C");  
        System.out.print("D");  
    }  
}
```

//- Output

```
E:\ICET\Assignment1>java Example  
ABCD
```



Q7.

```
class Example{  
    public static void main(String args[]){  
        System.out.println("1");  
        System.out.print("2");  
        System.out.println("3");  
        System.out.print("4");  
        System.out.print("5");  
        System.out.println("6");  
        System.out.print("7");  
        System.out.print("8");  
        System.out.print("9");  
        System.out.println("10");  
    }  
}
```

//- Output

```
E:\ICET\Assignment1>java Example  
1  
23  
456  
78910
```

```
E:\ICET\Assignment1>notepad Example.java
E:\ICET\Assignment1>javac Example.java
E:\ICET\Assignment1>java Example
1
23
456
78910
E:\ICET\Assignment1>
```

```
class Example{
    public static void main(String args[]){
        System.out.println("1");
        System.out.println();
        System.out.print("2");
        System.out.print("3");
        System.out.println();
        System.out.print("4");
        System.out.print("5");
        System.out.println("6");
        System.out.print("7");
        System.out.print("8");
        System.out.print("9");
        System.out.println("10");
    }
}
```

Q8.

```
class Example{
    public static void main(String args[]){
        System.out.print("1");
        System.out.println();
        System.out.print("2");
        System.out.print("3");
        System.out.println();
        System.out.print("4");
        System.out.print("5");
        System.out.print("6");
        System.out.println();
        System.out.print("7");
        System.out.print("8");
        System.out.print("9");
        System.out.print("10");
    }
}
```

//- Output

E:\ICET\Assignment1>java Example

```
1
23
456
78910
```

```
E:\ICET\Assignment1>notepad Example.java
E:\ICET\Assignment1>javac Example.java
E:\ICET\Assignment1>java Example
1
23
456
78910
E:\ICET\Assignment1>
```

```
class Example{
    public static void main(String args[]){
        System.out.print("1");
        System.out.println();
        System.out.print("2");
        System.out.print("3");
        System.out.println();
        System.out.print("4");
        System.out.print("5");
        System.out.println("6");
        System.out.print("7");
        System.out.print("8");
        System.out.print("9");
        System.out.println("10");
    }
}
```

Q9.

```
class Example{  
    public static void main(String args[]){  
        System.out.println("A");  
        System.out.println("B");  
        System.out.println();  
        System.out.println("C");  
        System.out.println("D");  
        System.out.print("");  
    }  
}
```

//- Output

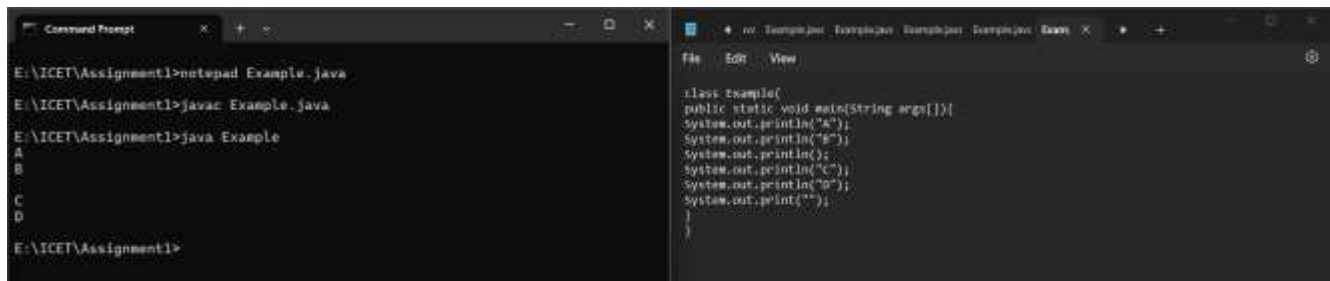
E:\ICET\Assignment1>java Example

A

B

C

D



The screenshot shows two windows side-by-side. The left window is a Command Prompt titled 'Command Prompt' with the following text:
E:\ICET\Assignment1>notepad Example.java
E:\ICET\Assignment1>javac Example.java
E:\ICET\Assignment1>java Example
A
B
C
D
E:\ICET\Assignment1>
The right window is an IDE titled 'Example.java' showing the following code:
class Example{
 public static void main(String args[]){
 System.out.println("A");
 System.out.println("B");
 System.out.println();
 System.out.println("C");
 System.out.println("D");
 System.out.print("");
 }
}

Q10.

```
class Example{  
    public static void main(String args[]){  
        System.out.println("A");  
        System.out.println("B");  
        System.out.println();  
        System.out.println("C");  
        System.out.println("D");  
    }  
}
```

//- Output

E:\ICET\Assignment1>java Example

A

B

C

D

```
E:\ICET\Assignment1>notepad Example.java
E:\ICET\Assignment1>javac Example.java
E:\ICET\Assignment1>java Example
A
a
C
D
E:\ICET\Assignment1>
```

```
class Example{
    public static void main(String args[]){
        System.out.println("A");
        System.out.println("a");
        System.out.println();
        System.out.println("C");
        System.out.println("D");
    }
}
```

Q11.

```
class Example{
    public static void main(String args[]){
        Int a;
        A = 100;
        System.out.println("a");
        System.out.println(a);
    }
}
```

//- Output

```
E:\ICET\Assignment1>java Example
a
100
```

```
E:\ICET\Assignment1>notepad Example.java
E:\ICET\Assignment1>javac Example.java
E:\ICET\Assignment1>java Example
a
100
E:\ICET\Assignment1>
```

```
class Example{
    public static void main(String args[]){
        int a;
        a = 100;
        System.out.println("a");
        System.out.println(a);
    }
}
```

Q12.

```
class Example{
    public static void main(String args[]){
        int a;
        System.out.println("a");
        System.out.println(a);
    }
}
```

//- Output

```
E:\ICET\Assignment1>javac Example.java
Example.java:5: error: variable a might not have been initialized
    System.out.println(a);
                      ^
1 error
```



```
E:\ICET\Assignment1>notepad Example.java
E:\ICET\Assignment1>javac Example.java
Example.java:5: error: variable a might not have been initialized
System.out.println(a);
^
1 error
E:\ICET\Assignment1>
```

```
class Example{
    public static void main(String args[]){
        int a;
        System.out.println("a");
        System.out.println(a);
    }
}
```

Q13.

```
class Example{
    public static void main(String args[]){
        int a=100;
        System.out.println(a);
    }
}
```

// -Output

```
E:\ICET\Assignment1>java Example
100
```

```
E:\ICET\Assignment1>notepad Example.java
E:\ICET\Assignment1>javac Example.java
E:\ICET\Assignment1>java Example
100
E:\ICET\Assignment1>
```

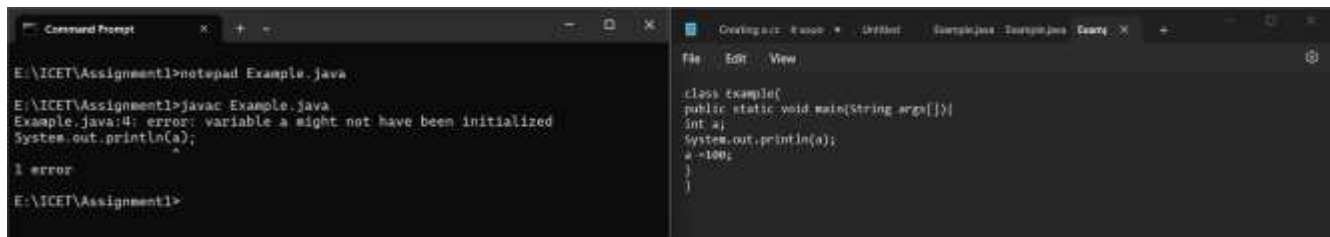
```
class Example{
    public static void main(String args[]){
        int a=100;
        System.out.println(a);
    }
}
```

Q14.

```
class Example{
    public static void main{String args[]){
        int a;
        System.out.println(a);
        a =100;
    }
}
```

// - Output

```
E:\ICET\Assignment1>javac Example.java
Example.java:4: error: variable a might not have been initialized
System.out.println(a);
^
1 error
```



```
Command Prompt
E:\ICET\Assignment1>notepad Example.java
E:\ICET\Assignment1>javac Example.java
Example.java:4: error: variable a might not have been initialized
System.out.println(a);
^
1 error
E:\ICET\Assignment1>
```

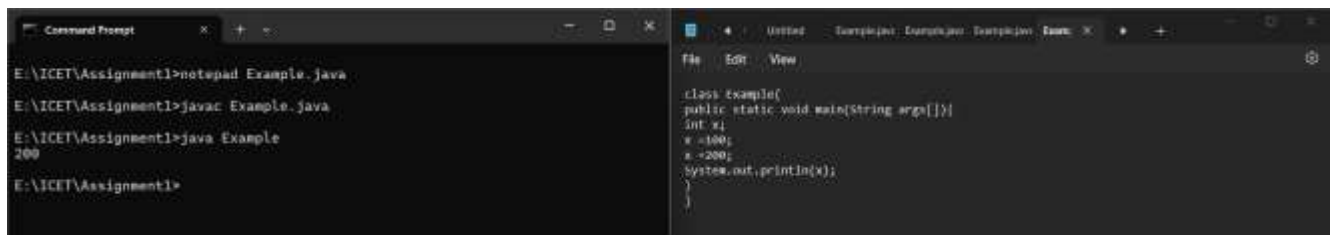
```
Example.java
class example{
public static void main(String args[]){
int a;
System.out.println(a);
a =100;
}
}
```

Q15.

```
class Example{
    public static void main(String args[]){
        int x;
        x =100;
        x=200;
        System.out.println(x);
    }
}
```

//- Output

```
E:\ICET\Assignment1>java Example
200
```



```
Command Prompt
E:\ICET\Assignment1>notepad Example.java
E:\ICET\Assignment1>javac Example.java
E:\ICET\Assignment1>java Example
200
E:\ICET\Assignment1>
```

```
Example.java
class example{
public static void main(String args[]){
int x;
x =100;
x =200;
System.out.println(x);
}
}
```

Q16.

```
class Example{
    public static void main(String args[]){
        int x;
        X =100;
        System.out.println(x);
        X =200;
        System.out.println(x);
    }
}
```

//- Output

```
E:\ICET\Assignment1>java Example
100
200
```

Q17.

```
class Example {  
    public static void main(String args[]){  
        int x=100;  
        int y=200;  
        System.out.println(x);  
        System.out.println(y);  
    }  
}
```

//- Output

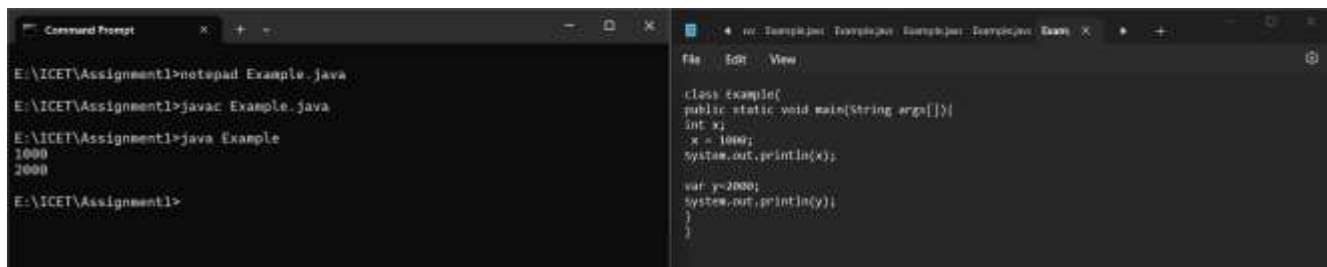
```
E:\ICET\Assignment1>java Example  
100  
200
```

Q18.

```
class Example {  
    public static void main(String args[]){  
        int x;  
        x=1000;  
        System.out.println(x);  
        var y=2000;  
        System.out.println(y);  
    }  
}
```

//- Output

```
E:\ICET\Assignment1>java Example  
1000  
2000
```

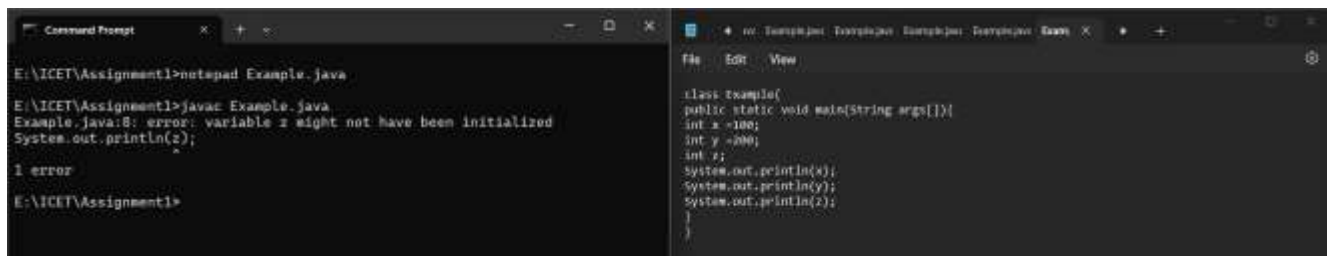


Q19.

```
class Example {
    public static void main(String args[]){
        int x=100;
        int y=200;
        int z;
        System.out.println(x);
        System.out.println(y);
        System.out.println(z);
    }
}
```

//- Output

```
E:\ICET\Assignment1>javac Example.java
Example.java:8: error: variable z might not have been initialized
    System.out.println(z);
                      ^
1 error
```



Q20.

```
class Example {
    public static void main(String args[]){
        int x=100,y,z=200;
        System.out.println(x);
        y="java";
        System.out.println(y);
        System.out.println(z);
    }
}
```

//- Output

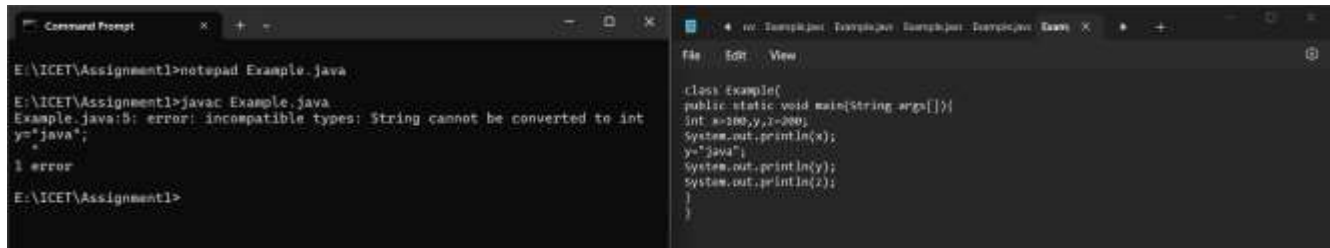
E:\ICET\Assignment1>javac Example.java

Example.java:5: error: incompatible types: String cannot be converted to int

y="java";

^

1 error



```
Command Prompt
E:\ICET\Assignment1>notepad Example.java
E:\ICET\Assignment1>javac Example.java
Example.java:5: error: incompatible types: String cannot be converted to int
y="java";
^
1 error
E:\ICET\Assignment1>

class Example{
    public static void main(String args[]){
        int x=200,y,x=200;
        System.out.println(x);
        y="java";
        System.out.println(y);
        System.out.println(z);
    }
}
```

Q21.

```
class Example {
    public static void main(String args[]){
        System.out.println("A");
        // System.out.println("B");
        System.out.println("C");
        // System.out.println("D");
        System.out.println("E");
    }
}
```

//- Output

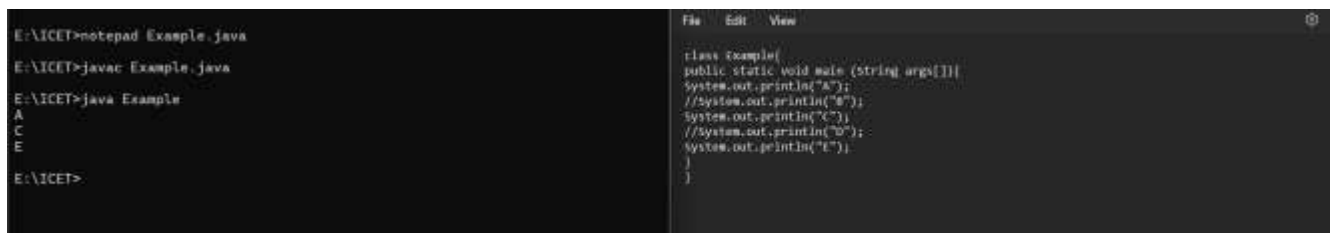
E:\ICET>java Example

A

C

E

E:\ICET>



```
E:\ICET>notepad Example.java
E:\ICET>javac Example.java
E:\ICET>java Example
A
C
E
E:\ICET>

class Example{
    public static void main (String args[]){
        System.out.println("A");
        //System.out.println("B");
        System.out.println("C");
        //System.out.println("D");
        System.out.println("E");
    }
}
```

Q22.

```
class Example {
    public static void main(String args[]){
```

```

        System.out.println("A");
        System.out.println("B");
        /*System.out.println("C");
        System.out.println("D");
        System.out.println("E");*/
        System.out.println("F");
    }
}

```

//- Output

E:\ICET>java Example

A
B
F

E:\ICET>

<pre> E:\ICET>javac Example.java E:\ICET>java Example A B F E:\ICET> </pre>	<pre> class Example{ public static void main (String args[]){ System.out.println("A"); System.out.println("B"); /*System.out.println("C"); System.out.println("D"); System.out.println("E");*/ System.out.println("F"); } } </pre>
--	--

Q23.

```

class Example {
    public static void main(String args[]){
        int x=100;
        int y=200;
        System.out.println(x);
        System.out.println(y);
        x=y;
        System.out.println(x);
        System.out.println(y);
    }
}

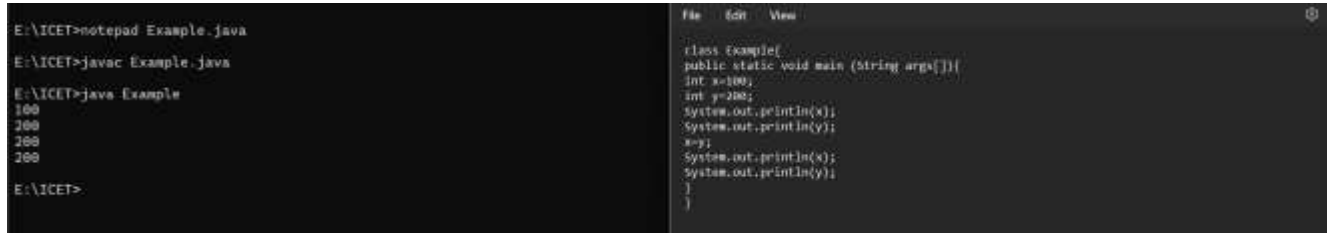
```

//- Output

E:\ICET>java Example

100
200
200

E:\ICET>



```

E:\ICET>notepad Example.java
E:\ICET>javac Example.java
E:\ICET>java Example
100
200
200
200
E:\ICET>

class Example{
public static void main (String args[]){
int x=100;
int y=200;
System.out.println(x);
System.out.println(y);
x=y;
System.out.println(x);
System.out.println(y);
}
}

```

Q24.

```

class Example {
    public static void main(String args[]){
        System.out.println(true);
        System.out.println("true");
    }
}

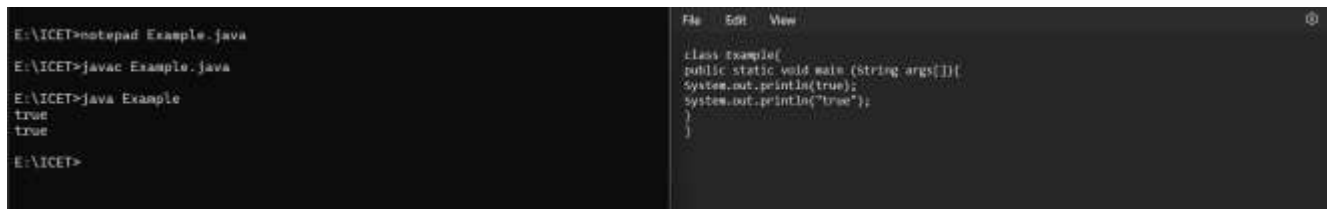
```

//- Output

```

E:\ICET>java Example
true
true

```



```

E:\ICET>notepad Example.java
E:\ICET>javac Example.java
E:\ICET>java Example
true
true
E:\ICET>

class Example{
public static void main (String args[]){
System.out.println(true);
System.out.println("true");
}
}

```

Q25.

```

class Example {
    public static void main(String args[]) {
        System.out.println(Java);
        System.out.println("Java");
    }
}

```

//- Output

```

E:\ICET>javac Example.java
Example.java:3: error: cannot find symbol
System.out.println(Java);

```

^

symbol: variable Java

location: class Example

1 error

```
E:\ICET>javac Example.java
Example.java:3: error: cannot find symbol
System.out.println(Java);
                    ^
    symbol:   variable Java
    location: class Example
1 error

E:\ICET>
```

```
class Example{
    public static void main(String args[]){
        System.out.println(Java);
        System.out.println("Java");
    }
}
```

Q26.

```
class Example {
    public static void main(String args[]){
        System.out.println('A');
        System.out.println("A");
        System.out.println('2');
        System.out.println("2");
        System.out.println('JAVA');
        System.out.println("JAVA");
    }
}
```

//- Output

```
E:\ICET>javac Example.java
Example.java:7: error: unclosed character literal
System.out.println('JAVA');
                  ^
```

```
Example.java:7: error: unclosed character literal
System.out.println('JAVA');
                  ^
```

```
Example.java:7: error: not a statement
System.out.println('JAVA');
                  ^
```

3 errors


```
File Edit View
class Example{
public static void main(String args[]){
System.out.println('A');
System.out.println("A");
System.out.println('2');
System.out.println("2");
System.out.println('JAVA');
System.out.println("JAVA");
}
}
```

Q27.

```
class Example {
    public static void main(String args[]) {
        System.out.println("Hellooooo\tJAVA");
        System.out.println("Hellooooo\t\t\t\t\tJAVA");
    }
}
```

//- Output

```
E:\ICET>java Example
Hellooooo    JAVA
Hellooooo    JAVA
```

[illegible]

Q28.

```
class Example {
    public static void main(String args[]){
        System.out.println("Hi\tJAVA");
        System.out.println("Hello\tWorld");
    }
}
```

//- Output

```
E:\ICET>java Example
Hi    JAVA
Hello world
```

```
E:\ICET>notepad Example.java
E:\ICET>javac Example.java
E:\ICET>java Example
Hi      JAVA
Hello   world
E:\ICET>
```

```
File Edit View
class Example{
public static void main (String args[]){
System.out.println("Hi\tJAVA");
System.out.println("Hello\tworld");
}
}
```

Q29.

```
class Example {
    public static void main(String args[]){
        System.out.println("AB\nCD");
        System.out.println("");
        System.out.println("EF\tGH\n\nIJ\tKL");
    }
}
```

//- Output

E:\ICET>java Example

AB

CD

EF GH

IJ KL

```
E:\ICET>notepad Example.java
E:\ICET>javac Example.java
E:\ICET>java Example
AB
CD

EF    GH
IJ    KL
```

```
File Edit View
class Example {
public static void main(String args[]){
System.out.println("AB\nCD");
System.out.println("");
System.out.println("EF\tGH\n\nIJ\tKL");
}
}
```

Q30.

```
class Example {
    public static void main(String args[]) {
        System.out.println("time - "17:56:02");
    }
}
```

//- Output

E:\ICET>javac Example.java

Example.java:3: error: ')' expected

System.out.println("time - "17:56:02");

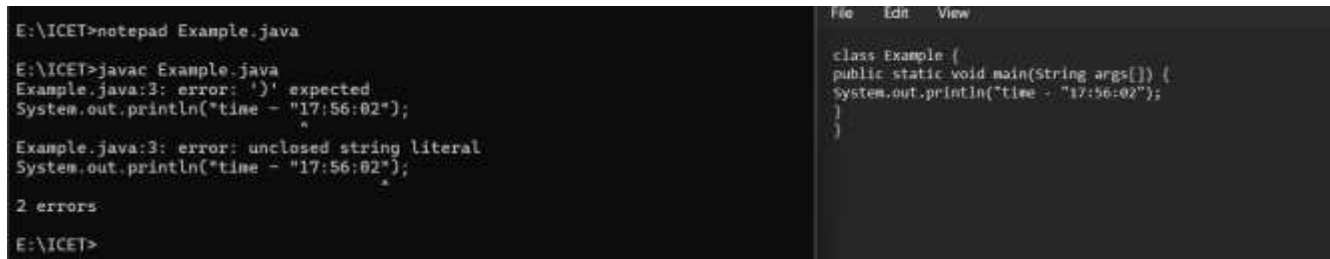
^

Example.java:3: error: unclosed string literal

System.out.println("time - "17:56:02");

^

2 errors

A screenshot of a Windows command prompt and Notepad. The command prompt shows the command 'E:\ICET>notepad Example.java' followed by the command 'E:\ICET>javac Example.java'. The output shows two errors: 'Example.java:3: error: ')' expected' and 'Example.java:3: error: unclosed string literal'. The Notepad window shows the code for Example.java: 'class Example { public static void main(String args[]) { System.out.println("time - "17:56:02"); } }'. The errors are indicated by caret symbols (^) pointing to the closing quote and the opening quote of the string literal in the code.

Q31.

```
class Example {  
    public static void main(String args[]){  
        System.out.println("\'ICET\");  
        System.out.println("\'Institute of Computer Engineering Technology \");  
    }  
}
```

//- Output

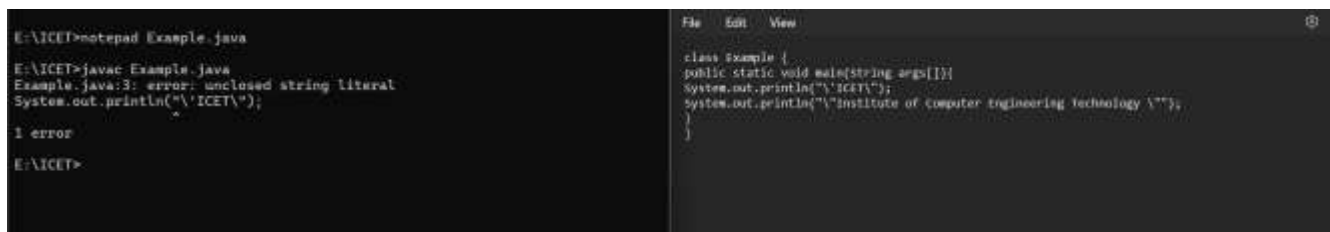
E:\ICET>javac Example.java

Example.java:3: error: unclosed string literal

System.out.println("\'ICET\");

^

1 error

A screenshot of a Windows command prompt and Notepad. The command prompt shows the command 'E:\ICET>notepad Example.java' followed by the command 'E:\ICET>javac Example.java'. The output shows one error: 'Example.java:3: error: unclosed string literal'. The Notepad window shows the code for Example.java: 'class Example { public static void main(String args[]){ System.out.println("\'ICET\"); System.out.println("\'Institute of computer engineering technology \"); } }'. The error is indicated by a caret symbol (^) pointing to the closing quote of the string literal in the code.

Q32.

```
class Example {  
    public static void main(String args[]){  
        System.out.println("First Line\nSecond Line");  
        System.out.println("A\tB\tC");  
        System.out.println("D\tE\tF");  
    }  
}
```

//- Output

E:\ICET>java Example

First Line

Second Line

A B C

D E F



```
E:\ICET>javac Example.java  
E:\ICET>java Example  
First Line  
Second Line  
A    B    C  
D    E    F  
E:\ICET>
```

Q33.

```
class Example {  
    public static void main(String args[]){  
        System.out.println("AB\nCD");  
        System.out.println("AB\tCD");  
        System.out.println("AB\fCD");  
        System.out.println("AB\bCD");  
        System.out.println("AB\rCD");  
        System.out.println("AB\\CD");  
    }  
}
```

//- Output

E:\ICET>java Example

AB

CD

AB CD

AB

CD
ACD
CD
AB\CD

```
E:\ICET>notepad Example.java
E:\ICET>javac Example.java
E:\ICET>java Example
AB
CD
AB    CD
AB
CD
ACD
CD
AB\CD
E:\ICET>
```

```
File Edit View

class Example {
    public static void main(String args[]){
        System.out.println("AB\nCD");
        System.out.println("AB\tCD");
        System.out.println("AB\fCD");
        System.out.println("AB\bCD");
        System.out.println("AB\rCD");
        System.out.println("AB\\CD");
    }
}
```

Q34.

```
class Example {
    public static void main(String args[]){
        System.out.println(10+20);
        System.out.println("10"+"20");
        System.out.println("10"+20);
        System.out.println(10+"20");
    }
}
```

//- Output

```
E:\ICET>java Example
30
1020
1020
1020
```

```
E:\ICET>notepad Example.java
E:\ICET>javac Example.java
E:\ICET>java Example
30
1020
1020
1020
E:\ICET>
```

```
File Edit View

class Example {
    public static void main(String args[]){
        System.out.println(10+20);
        System.out.println("10"+"20");
        System.out.println("10"+20);
        System.out.println(10+"20");
    }
}
```

Q35.

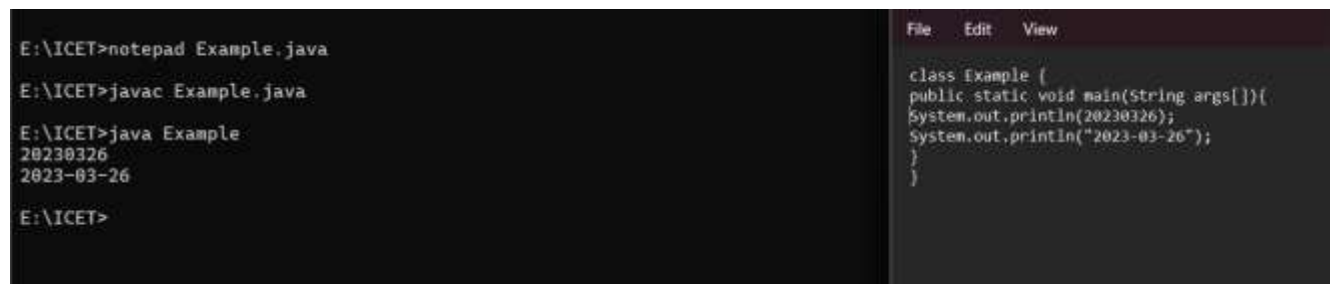
```
class Example {  
    public static void main(String args[]){  
        System.out.println(20230326);  
        System.out.println("2023-03-26");  
    }  
}
```

//- Output

E:\ICET>java Example

20230326

2023-03-26



The screenshot shows a terminal window on the left and a code editor on the right. The terminal window displays the following commands and output:

```
E:\ICET>notepad Example.java  
E:\ICET>javac Example.java  
E:\ICET>java Example  
20230326  
2023-03-26  
E:\ICET>
```

The code editor on the right shows the source code of the Java program:

```
class Example {  
    public static void main(String args[]){  
        System.out.println(20230326);  
        System.out.println("2023-03-26");  
    }  
}
```

Q36.

```
class Example {  
    public static void main(String args[]){  
        int x,y,z;  
        x=10;  
        y=20;  
        z=x+y;  
        System.out.println(x+"+"+y+"="+z);  
    }  
}
```

//- Output

E:\ICET>javac Example.java

E:\ICET>java Example

10+20=30



The screenshot shows a terminal window on the left and a code editor on the right. The terminal window displays the following commands and output:

```
E:\ICET>notepad Example.java  
E:\ICET>javac Example.java  
E:\ICET>java Example  
10+20=30  
E:\ICET>
```

The code editor on the right shows the source code of the Java program:

```
class Example {  
    public static void main(String args[]){  
        int x,y,z;  
        x=10;  
        y=20;  
        z=x+y;  
        System.out.println(x+"+"+y+"="+z);  
    }  
}
```

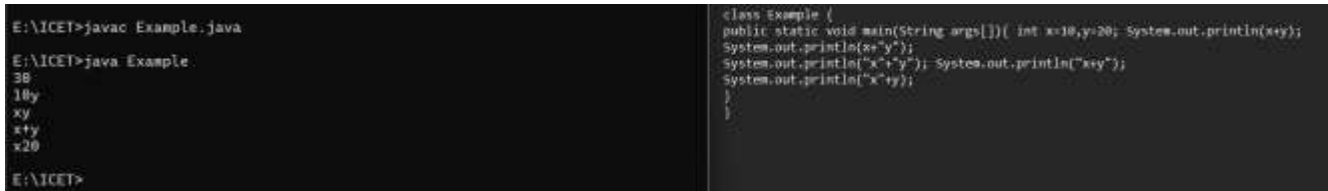
Q37.

```
class Example {  
    public static void main(String args[]){ int x=10,y=20;  
        System.out.println(x+y);  
        System.out.println(x+"y");  
        System.out.println("x"+"y");  
        System.out.println("x+y");  
        System.out.println("x"+y);  
    }  
}
```

//- Output

E:\ICET>java Example

30
10y
xy
x+y
x20



```
E:\ICET>javac Example.java  
E:\ICET>java Example  
30  
10y  
xy  
x+y  
x20  
E:\ICET>
```

```
class Example {  
    public static void main(String args[]){ int x=10,y=20; System.out.println(x+y);  
        System.out.println(x+"y");  
        System.out.println("x"+"y");  
        System.out.println("x+y");  
        System.out.println("x"+y);  
    }  
}
```

Q38.

```
class Example {  
    public static void main(String args[]) {  
        System.out.println (10 + 20 + 30);  
        System.out.println ("10 + 20 +30");  
        System.out.println (10 + 20 + 30);  
        System.out.println("10+20"+30);  
        System.out.println("10"+"20"+"30");  
        System.out.println ("10"+ 20 + 30 );  
        System.out.println ( 10 + 20 +"30");  
        System.out.println(10+"20"+30);  
    }  
}
```

//- Output

E:\ICET>java Example

```
60
10 + 20 +30
60
10+2030
102030
102030
3030
102030
```



The screenshot shows a Notepad window with the following Java code:

```
class Example {
    public static void main(String args[]) {
        System.out.println (10 + 20 + 30);
        System.out.println ("10 + 20 +30");
        System.out.println (10 + 20 + 30);
        System.out.println("10+20"+30);
        System.out.println("10"+"20"+"30");
        System.out.println ("10"+ 20 + 30 );
        System.out.println ( 10 + 20 + "30");
        System.out.println(10+"20"+30);
    }
}
```

Below the Notepad window is a command prompt showing the execution of the code:

```
E:\ICET>notepad Example.java
E:\ICET>javac Example.java
E:\ICET>java Example
60
10 + 20 +30
60
10+2030
102030
102030
3030
102030
E:\ICET>
```

Q39.

```
class Example {
    public static void main(String args[]){
        String s1="Hello";
        System.out.println(s1);
        System.out.println(s1.concat(" JAVA"));
    }
}
```

//- Output

E:\ICET>javac Example.java

Example.java:4: error: cannot find symbol

System.out.println(s1);

^

symbol: variable s1

location: class Example

1 error


```
E:\ICET>notepad Example.java
E:\ICET>javac Example.java
Example.java:4: error: cannot find symbol
System.out.println(s1);
                   ^
  symbol:   variable s1
  location: class Example
1 error
```

```
File Edit View
class Example {
    public static void main(String args[]){
        String s1="Hello";
        System.out.println(s1);
        System.out.println(s1.concat(" JAVA"));
    }
}
```

Q40.

```
class Example {
    public static void main(String args[]){
        int x, y, z;
        x=10;
        y=20;
        z=x+y;
        System.out.println(x+" "+"y+" "+"= "+z); z=x-y;
        System.out.println(x+" - "+y+" "+"= "+z); z=x*y;
        System.out.println(x+"*"+y+" "+"= "+z);
    }
}
```

//- Output

```
E:\ICET>java Example
10 + 20 = 30
10 - 20 = -10
10*20 = 200
```

```
E:\ICET>javac Example.java
E:\ICET>java Example
10 + 20 = 30
10 - 20 = -10
10*20 = 200
E:\ICET>
```

```
class Example {
    public static void main(String args[]){
        int x, y, z;
        x=10;
        y=20;
        z=x+y;
        System.out.println(x+" "+"y+" "+"= "+z); z=x-y;
        System.out.println(x+" - "+y+" "+"= "+z); z=x*y;
        System.out.println(x+"*"+y+" "+"= "+z);
    }
}
```

Q41.

```
class Example{
    public static void main(String args[]){
        int x, y;
        X=10;
        Y=20;
        System.out.println(x+" "+"y+" "+"= "+(x+y));
        System.out.println(x+" - "+y+" "+"= "+(x-y));
        System.out.println(x+"*"+y+" "+"= "+(x*y));
    }
}
```

//- Output

E:\ICET>java Example

10+20=30

10-20=-10

10*20=200

<pre>E:\ICET>java Example 10+20=30 10-20=-10 10*20=200 E:\ICET></pre>	<pre>class Example{ public static void main (String args[]){ int x, y; x=10; y=20; System.out.println(x+"+y="+{(x+y)); System.out.println(x+"-y="+{(x-y)); System.out.println(x+"*y="+{(x*y)); } }</pre>
---	--

Q42.

```
class Example{
    public static void main(String args[]){
        int x, y;
        X=100;
        Y=200;
        System.out.println(x);
        System.out.println(y);

        Y=x;
        System.out.println(x);
        System.out.println(y);
    }
}
```

//- Output

E:\ICET>java Example

100

200

100

100

```
E:\ICET>notepad Example.java
E:\ICET>javac Example.java
E:\ICET>java Example
100
200
100
100
E:\ICET>
```

```
File Edit View
class Example{
public static void main (String args[]){
int x, y;
x=100;
y=200;
System.out.println(x);
System.out.println(y);

y=x;
System.out.println(x);
System.out.println(y);
}
}
```

Q43.

```
class Example{
    public static void main(String args[]){
        int num=103;
        if(num>0){
            System.out.println(num+"is positive number");
        } else if(num<0){
            System.out.println(num+"is negative number");
        } else{
            System.out.println(num+"is 0");
        }
    }
}
```

//- Output

```
E:\ICET>java Example
103id Positive number
```

```
E:\ICET>notepad Example.java
E:\ICET>javac Example.java
E:\ICET>java Example
103id Positive number
E:\ICET>
```

```
File Edit View
class Example{
public static void main (String args[]){
int num=103;
if(num>0){
System.out.println(num+"id Positive number");
} else if (num>0){
System.out.println(num+"is negative number");
}
}
}
```

Q44.

```
import java.util.*;
class Example{
    public static void main(String args[]){
        Scanner input = new Scanner(System.in);
        System.out.println("Input number-");
```

```

        int num=input.nextInt();
    if(num>0){
    System.out.println(num+"is positive number");
    }else if(num<0){
        System.out.println(num+"is negative number");
    }else{
        System.out.println(num+"is 0");
    }
    }
}

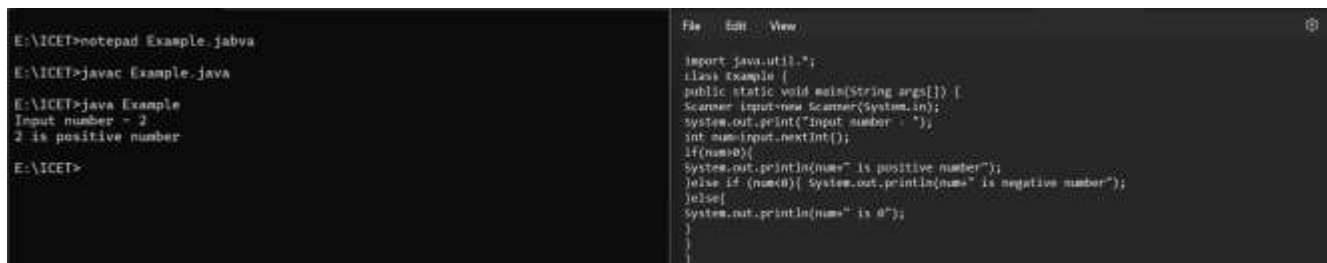
```

//- Output

E:\ICET>java Example

Input number - 2

2 is positive number



The screenshot shows a terminal window on the left and a code editor on the right. The terminal window displays the following commands and output:

```

E:\ICET>notepad Example.java
E:\ICET>javac Example.java
E:\ICET>java Example
Input number - 2
2 is positive number
E:\ICET>

```

The code editor on the right shows the source code of the Java program:

```

import java.util.*;
class Example {
    public static void main(String args[]) {
        Scanner input=new Scanner(System.in);
        System.out.print("Input number : ");
        int num=input.nextInt();
        if(num>0){
            System.out.println(num+" is positive number");
        }else if (num<0){ System.out.println(num+" is negative number");
        }else{
            System.out.println(num+" is 0");
        }
    }
}

```

Q45.

```
import java.util.*;
```

```

    class Example {
        public static void main(String args[]) {
            Scanner input=new Scanner(System.in); System.out.print("Enter your marks - ");
            int mark=input.nextInt();
            if(mark>=75){
                System.out.println("your grade is A");
            }else if (mark >=65){
                System.out.println("your grade is B"); }else if(mark >=50) {
                System.out.println("your grade is C");
            }else{
                System.out.println("your grade is F");
            }
        }
    }
}

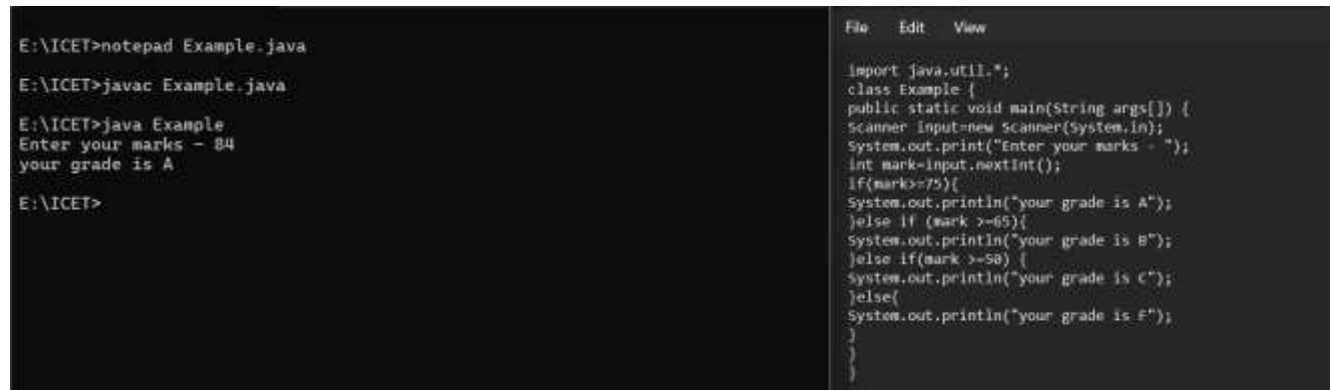
```

//- Output

E:\ICET>java Example

Enter your marks - 84

your grade is A



The screenshot shows a Windows command prompt window on the left and a Notepad window on the right. The command prompt shows the execution of a Java program: `E:\ICET>notepad Example.java`, `E:\ICET>javac Example.java`, `E:\ICET>java Example`, followed by user input `Enter your marks - 84` and the output `your grade is A`. The Notepad window displays the source code of `Example.java`, which uses a `Scanner` to read an integer mark and prints a grade based on the mark's value.

```
E:\ICET>notepad Example.java
E:\ICET>javac Example.java
E:\ICET>java Example
Enter your marks - 84
your grade is A
E:\ICET>
```

```
File Edit View
import java.util.*;
class Example {
    public static void main(String args[]) {
        Scanner input=new Scanner(System.in);
        System.out.print("Enter your marks - ");
        int mark=input.nextInt();
        if(mark>=75){
            System.out.println("your grade is A");
        }else if (mark >=65){
            System.out.println("your grade is B");
        }else if(mark >=50) {
            System.out.println("your grade is C");
        }else{
            System.out.println("your grade is F");
        }
    }
}
```

Q46.

```
import java.util.*;
class Example {
    public static void main(String args[]) {
        Scanner input=new Scanner(System.in);
        System.out.print("Enter your age - ");
        int age=input.nextInt();
        if(age<18){
            System.out.println("age is not valid to vote");
        }else{
            System.out.println("Welcome to vote");
        }
    }
}
```

//- Output

E:\ICET>java Example

Enter your age - 22

Welcome to vote

```
E:\ICET>notepad Example.java
E:\ICET>javac Example.java
E:\ICET>java Example
Enter your age - 22
Welcome to vote
E:\ICET>
```

```
File Edit View
import java.util.*;
class Example {
    public static void main(String args[]) {
        Scanner input=new Scanner(System.in);
        System.out.print("Enter your age - ");
        int age=input.nextInt();
        if(age<18){
            System.out.println("age is not valid to vote");
        }else{
            System.out.println("welcome to vote");
        }
    }
}
```

Q47.

```
class Example {
    public static void main(String args[]) {
        double x, y, z;
        x=3;
        y=4;
        z=Math.sqrt(x*x + y*y);
        System.out.println("Hypotenuse is" +z);
    }
}
```

//- Output

```
E:\ICET>java Example
Hypotenuse is5.0
```

```
E:\ICET>notepad Example.java
E:\ICET>javac Example.java
E:\ICET>java Example
Hypotenuse is5.0
E:\ICET>
```

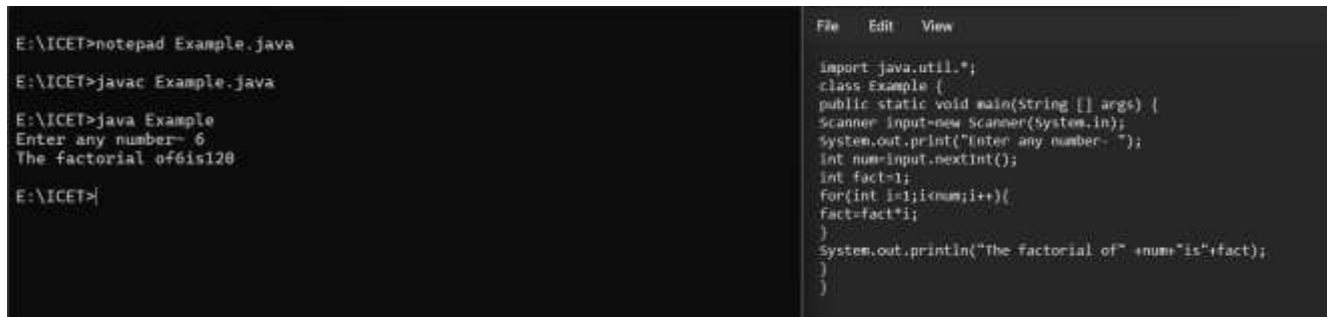
```
File Edit View
class Example {
    public static void main(String args[]) {
        double x, y, z;
        x=3;
        y=4;
        z=Math.sqrt(x*x+y*y);
        System.out.println("Hypotenuse is" +z);
    }
}
```

Q48.

```
import java.util.*;
class Example {
    public static void main(String [] args) {
        Scanner input=new Scanner(System.in);
        System.out.print("Enter any number- ");
        int num=input.nextInt();
        int fact=1;
        for(int i=1;i<num;i++){
            fact=fact*i;
        }
        System.out.println("The factorial of" +num+"is"+fact);
    }
}
```

//- Output

```
E:\ICET>java Example
Enter any number- 6
The factorial of 6 is 120
```

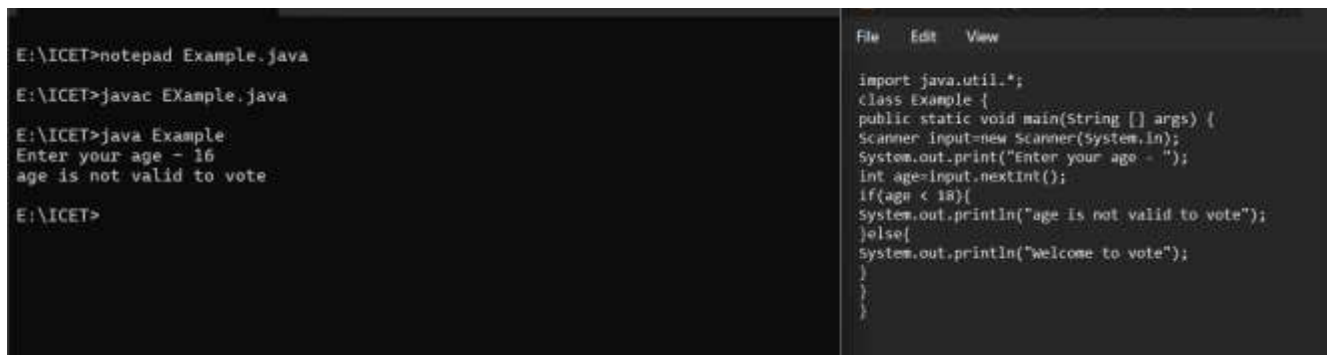
A screenshot of a Java IDE with two panes. The left pane shows the command prompt output: E:\ICET>notepad Example.java, E:\ICET>javac Example.java, E:\ICET>java Example, Enter any number- 6, The factorial of 6 is 120, and E:\ICET>. The right pane shows the source code of Example.java: import java.util.*; class Example { public static void main(String [] args) { Scanner input=new Scanner(System.in); System.out.print("Enter any number- "); int num=input.nextInt(); int fact=1; for(int i=1;i<=num;i++){ fact=fact*i; } System.out.println("The factorial of " +num+"is"+fact); } }

Q49.

```
import java.util.*;
class Example {
    public static void main(String [] args) {
        Scanner input=new Scanner(System.in);
        System.out.print("Enter your age - ");
        int age=input.nextInt();
        if(age < 18){
            System.out.println("age is not valid to vote");
        }else{
            System.out.println("Welcome to vote");
        }
    }
}
```

//- Output

```
E:\ICET>java Example
Enter your age - 16
age is not valid to vote
```

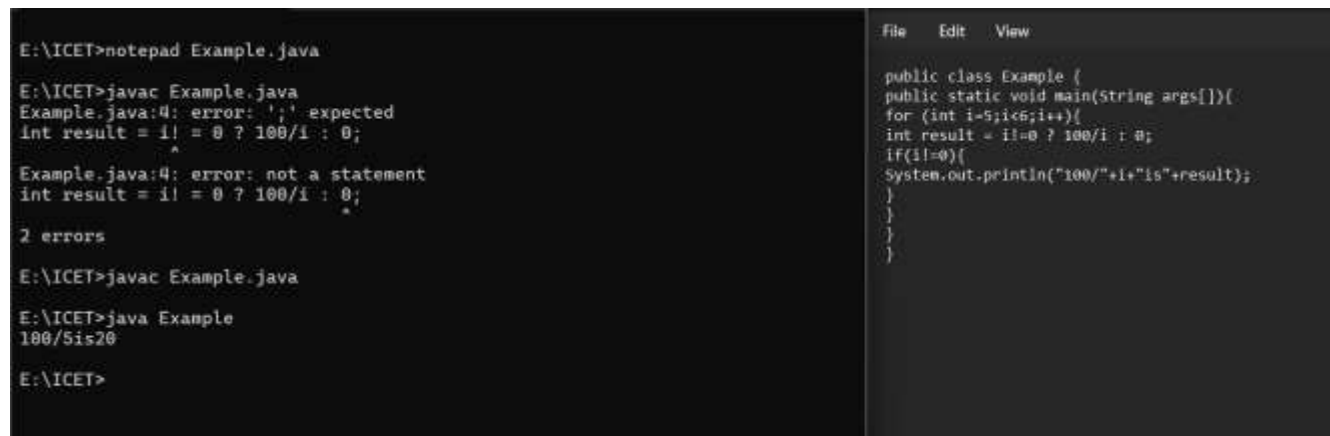
A screenshot of a Java IDE with two panes. The left pane shows the command prompt output: E:\ICET>notepad Example.java, E:\ICET>javac Example.java, E:\ICET>java Example, Enter your age - 16, age is not valid to vote, and E:\ICET>. The right pane shows the source code of Example.java: import java.util.*; class Example { public static void main(String [] args) { Scanner input=new Scanner(System.in); System.out.print("Enter your age - "); int age=input.nextInt(); if(age < 18){ System.out.println("age is not valid to vote"); }else{ System.out.println("Welcome to vote"); } } }

Q50

```
public class Example{
    public static void main(String args[]){
        for (int i=5;i<6;i++){
            int result = i!= 0 ? 100/i : 0;
            if(i!=0){
                System.out.println("100/"+i+"is"+result);
            }
        }
    }
}
```

//- Output

```
E:\ICET>java Example
100/5is20
```



The screenshot shows a Java IDE with a dark theme. On the left, the command prompt shows the following sequence of commands and outputs:

```
E:\ICET>notepad Example.java
E:\ICET>javac Example.java
Example.java:4: error: ';' expected
int result = i! = 0 ? 100/i : 0;
                ^
Example.java:4: error: not a statement
int result = i! = 0 ? 100/i : 0;
                ^
2 errors
E:\ICET>javac Example.java
E:\ICET>java Example
100/5is20
E:\ICET>
```

On the right, the code editor displays the source code for `Example.java`:

```
public class Example {
    public static void main(String args[]){
        for (int i=5;i<6;i++){
            int result = i!=0 ? 100/i : 0;
            if(i!=0){
                System.out.println("100/"+i+"is"+result);
            }
        }
    }
}
```