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Q1)

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

OUTPUT

```
E:\ICET 110>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 110>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 110>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 110>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("-0.0023");
		System.out.println('A');
		System.out.println('6');
		System.out.println(true);
		System.out.println(false);

	}
}
```

OUTPUT

```
E:\ICET 110>Java Example
Hello
A
1234
-1234
```

1.2334
0.0032
-0.0023
A
6
true
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 110>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 110>java Example
1
23
456
78910
```

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 110>java Example
1
23
456
78910
```

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 110>java Example
A
B
```

C
D

Q10)

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

OUTPUT

```
E:\ICET 110>javac Example.java
Example.java:5: error: no suitable method found for print(no arguments)
		System.out.print();
			^
  method PrintStream.print(boolean) is not applicable
    (actual and formal argument lists differ in length)
  method PrintStream.print(char) is not applicable
    (actual and formal argument lists differ in length)
  method PrintStream.print(int) is not applicable
    (actual and formal argument lists differ in length)
  method PrintStream.print(long) is not applicable
    (actual and formal argument lists differ in length)
  method PrintStream.print(float) is not applicable
    (actual and formal argument lists differ in length)
  method PrintStream.print(double) is not applicable
    (actual and formal argument lists differ in length)
  method PrintStream.print(char[]) is not applicable
    (actual and formal argument lists differ in length)
  method PrintStream.print(String) is not applicable
    (actual and formal argument lists differ in length)
  method PrintStream.print(Object) is not applicable
    (actual and formal argument lists differ in length)
1 error
```

Q11)

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

OUTPUT

```
E:\ICET 110>java Example
a
100
```

Q12)

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

OUTPUT

```
E:\ICET 110>javac Example.java
Example.java:5: error: variable a might not have been initialized
		System.out.println(a);
		                   ^
1 error
```

Q13)

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

OUTPUT

```
E:\ICET 110>java Example
100
```

Q14)

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

OUTPUT

```
E:\ICET 110>javac Example.java
Example.java:4: error: variable a might not have been initialized
            System.out.println(a);
                               ^
1 error
```

Q15)

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

OUTPUT

```
E:\ICET 110>java Example
200
```

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 110>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 110>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 110>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 110>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 110>javac Example.java
Example.java:5: error: incompatible types: String cannot be converted to int
            y="java";
              ^
1 error
```

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 110>java Example
A
C
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 110>java Example
A
B
F
```

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 110>java Example
100
200
200
200
```

Q24)

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

OUTPUT

```
E:\ICET 110>java Example
true
true
```

Q25)

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

OUTPUT

```
E:\ICET 110>javac Example.java
Example.java:3: error: cannot find symbol
		System.out.println(Java);
		                   ^
  symbol:   variable Java
  location: class Example
1 error
```

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 110>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
```

Q27)

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

OUTPUT

```
E:\ICET 110>java Example
Hellooooo       JAVA
Hellooooo                       JAVA
```

Q28)

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

OUTPUT

```
E:\ICET 110>java Example
Hi      JAVA
Hello   World
```

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 110>java Example
AB
CD

EF	GH

IJ	KL
```

Q30)

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

OUTPUT

```
E:\ICET 110>javac Example.java
Example.java:3: error: ')' expected
		System.out.println("time - "17:56:02"");
		                          ^
1 error
```

Q31)

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

	}
}
```

OUTPUT

```
E:\ICET 110>java Example
'iCET"
"Institute of Computer Engineering Technology"
```

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 110>java Example
First Line
Second Line
A       B       C
D       E       F
```

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 110>java Example
AB
CD
AB      CD
AB
CD
ACD
CD
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 110>java Example
30
1020
1020
1020
```

Q35)

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

OUTPUT

```
E:\ICET 110>java Example
20230326
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 110>java Example
10+20=30
```

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 110>java Example
30
xy
x+y
x20
10y
```

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 110>java Example
60
10+20+30
60
10+2030
102030
102030
3030
102030
```

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 110>java Example
Hello
Hello 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 110>java Example
10 + 20 = 30
10 - 20 = -10
10 * 20 = 200
```

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 110>java Example
10 + 20 = 30
10 - 20 = -10
10 * 20 =200
```

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 110>java Example
100
200
100
100
```

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 110>java Example
103is positive number
```

Q44)

```
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");
        }
   }
}
```

OUTPUT

```
E:\ICET 110>java Example
Input number-
```

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 110>java Example
Enter your marks-
```

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 110>java Example
Enter your age -
```

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 110>java Example
Hypotenuse is 5.0
```

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 110>java Example
Enter any number -
```

Q49)

```
import java.util.*;
class Example{
   public static void main(String args[]){
          Scanner input=new Scanner(System.in);
          System.out.print("Input 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 110>java Example
Input your age –
```

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 110>java Example
100/-5is-20
100/-4is-25
100/-3is-33
100/-2is-50
100/-1is-100
100/1is100
100/2is50
100/3is33
100/4is25
100/5is20
```