

**1)**

```

import java.util.*;
class Example {
    public static void main(String args[]){
        Scanner input = new Scanner(System.in);

        System.out.print("Input first number: ");
        int num1 = input.nextInt();

        System.out.print("Input second number: ");
        int num2 = input.nextInt();

        if(num1 > num2) {
            int total=num1 + num2;
            System.out.println("Total is:" + total);
        }
        else if(num1 < num2) {
            System.out.println("num1");
            System.out.println("num2");
        }
    }
}

```

**2)**

```

import java.util.*;
class A {
    public static void main(String args[]){
        Scanner input=new Scanner(System.in);

        System.out.println("Input an any integer: ");
        int num=input.nextInt();

        int abs=(num<0)? -num:num;
        System.out.println("The absolute value is" + abs);
    }
}

```

**3)**

```

import java.util.*;
class A {
    public static void main(String args[]){
        Scanner input=new Scanner(System.in);

        System.out.print("Input chemistry mark:");
        int mark1=input.nextInt();
        System.out.print("Input physics mark:");
        int mark2=input.nextInt();
        System.out.print("Input maths mark:");
        int mark3=input.nextInt();

        int total=mark1 + mark2 + mark3;
        System.out.println("Total is:" + total);

        int average=total/3;
    }
}

```

```

        System.out.println("Average is:" + average);

        if(average >= 75){
            System.out.println("Pass");
        }else{
            System.out.println("Fail");
        }
    }
}

```

output:-  
 Input chemistry mark:40  
 Input physics mark:60  
 Input maths mark:80  
 Total is:180  
 Average is:60  
 Fail

**4)**

```

import java.util.*;
class Example {
    public static void main(String args[]){
        Scanner input = new Scanner(System.in);

        System.out.print("Enter the unit_price: ");
        double price = input.nextDouble();

        System.out.print("Enter the amount bought:");
        double amount = input.nextDouble();

        double total = price*amount;
        System.out.println("Total is:" + total);
        if(total>1500){
            System.out.println("You are entitled for the super
draw");
        }else{
            System.out.println("Try again");
        }
    }
}

```

**5)**

```

import java.util.*;
class Example {
    public static void main(String args[]){
        Scanner input = new Scanner(System.in);

        System.out.print("Enter the unit_price: ");
        double price = input.nextDouble();

        System.out.print("Enter the amount bought:");
        double amount = input.nextDouble();

        double total = price*amount;
    }
}

```

```

        if(total>500){
            double discount=0.05*total;
            double x=total - discount;
            System.out.println("discount given Rs:" + discount);
            System.out.println("New total Rs:" + x );
        } else{
            System.out.println("No discount given");
        }
    }
}

```

output:-

Enter the unit\_price: 10  
Enter the amount bought:80  
discount given Rs:40.0  
New total Rs:760.0

Enter the unit\_price: 10  
Enter the amount bought:10  
No discount given

**6)**

```

import java.util.*;
class Example {
    public static void main(String args[]){
        Scanner input = new Scanner(System.in);

        System.out.print("Enter a year: ");
        int year = input.nextInt();

        if(year%4 == 0){
            System.out.println("Leap year:");
        } else{
            System.out.println("Not a leap year:");
        }
    }
}

```

**7)**

```

import java.util.*;
class A {
    public static void main(String args[]){
        Scanner input=new Scanner(System.in);

        System.out.print("Enter the radius of the circle:");
        double radius=input.nextInt();

        double area=3.14*radius*radius;
        System.out.println("The area of the circle is:" + area);
    }
}

```

**8)****9)**

```

import java.util.*;
class A {
    public static void main(String args[]){
        Scanner input=new Scanner(System.in);

        System.out.print("Input num1:");
        int a=input.nextInt();
        System.out.print("Input num2:");
        int b=input.nextInt();
        System.out.print("Input num3:");
        int c=input.nextInt();

        int max=a;
        if(max<b){
            max=b;
        }if(max<c){
            max=c;
        }
        System.out.println("Max value:" + max);
    }
}

```

**10)**

```

import java.util.*;
class Main {
    public static void main(String args[]){
        Scanner input = new Scanner(System.in);
        System.out.print("Input a number: ");
        int num = input.nextInt(); //8
        if(num % 2 == 0) {
            System.out.println(num + " is a Even");
        } else {
            System.out.println(num + " is a Odd");
        }
    }
}

```

**11)**

if(x){} - this line is not legal

if(x=10){} -

if(x==10){} - this line is legal

if(x=100!=10){}

if((x=100)!=10){} - this line is legal

if((x=100)>0==true){} - this line is legal

**12)** A: if(b){}. - The line that can be legally inserted at line 10 is option

**13)**

9

true

true

false

true

**14)**

true

true

true

false

true

false

true

**15)**

++x==x : 100

x==x++ : 100

++x==x++ : 101

**16)**

++x==x : 101

x==x++ : 102

++x==x++ : 109

**17)**

x++==y : 100 : 99

x==++y : 101 : 101

++x==++y : 102 : 102

x++==y++ : 103 : 103

**18)**

C. if(++x>=10)

**19)**

C. if(x++==y++)

**20)**

line 1 :- 2351.521.231ctrue

line 2 :- 101001251.521.231ctrue

line 3 :- 356.731true

line 4 :- compile error

line 5 :-compile error

**21)**

true

false

true

false

true

false

false

**22)**

10

true

true

true

true

false

**23)**

A.1 2 3

B.2 3

C.3

D.4 1 2 3

E.4 1 2 3

F.4 1 2 3

**24)**

1.legal

2.legal

3.legal

4.legal

5.egal

6.legal

7.legal

8.llegal

9.llegal

10.llegal

**25)**

- A.3
- B.2 3 1
- C.3 1
- D.4
- E.4
- F.4

**26)**

- A.0
- B.0
- C.
- D.
- E. 0

**27)**

- A. Prints: g, i, l.

**28)** D

**29)**

Only options B, C, D, and H can be inserted legally at line 10.

**30)**

- A. char x='A'; - This code can be inserted legally at line 4.
- B. int x=65; - This code will result in a compilation error
- C. int x=65536; - This code will result in a compilation error because 65536 is outside the range of a character data type.
- D. byte x=65; - This code will result in a compilation error because a byte value cannot be implicitly converted to a character type.
- E. short x=66; - This code will result in a compilation error because a short value cannot be implicitly converted to a character type.
- F. boolean x=true; - This code will result in a compilation error because a boolean value cannot be used in a switch statement.
- G. String x="A"; - This code will result in a compilation error
- H. double x=65.0; - This code will result in a compilation error

**31)**

A.Pass

Thanking you..

B.Pass

Thanking you..

C.Fail

Thanking you..

D.Pass

Thanking you..

E.Pass

Thanking you..

F.Fail

Thanking you..

G.Fail

Thanking you..

**32.**

line1 -: 37

line2 -: error

line3 -: compile error

line4 -: 13.349999999999999

line5 -: 5.625

line6 -: compile error

line7 -: 15.0

line8 -: 6

line9 -: -10.0000000000000028

line10 -: 10

line12 -: -9

line13 -: 4

line14 -: 4

line 15 -: 2

**33)**

2 3 4 5 10

14 12 9 5 24

5 5 5 5 5

**34)**

false

true

true

false

true

true

false



**35)**

false  
false  
true  
false