

SIKSHA 'O' ANUSANDHAN
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Admission Batch:

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Laboratory Record

Introduction to Computer Programming (CSE 1001)

Submitted by

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1) Write a java program to display the following messages.

Hello World !

Hello Again

I Like typing this.

This is Fun.

Yay ! Printing.

I'd much rather you 'not'.

I "said" do not touch this.

Package assignment 1;

/* Author's name :

* Author's registration no. :

* Author's Semester :

* Author's Branch - Section :

* Subject : Introduction to Computer
Programming (CSE 1001)

* Problem Description :

*/

Public class Ques 1 {

Public static void main (String [] args) {

System.out.println ("Hello World !");

System.out.println ("Hello Again");

System.out.println ("I Like typing this");

System.out.println ("This is Fun");

System.out.println ("Yay ! Printing");

Rudra Prasad Rautray

Name: _____

Page: 01

Regd. Number: _____

2041018081

```
System.out.println("I'd much rather you  
(not'.");  
System.out.println("I\"said\" do not touch  
this.");
```

Output

```
Hello World !  
Hello Again  
I Like typing this  
This is Fun  
Yay ! printing  
I'd much rather you 'not'.  
I "said" do not touch this.
```

2) Write a java Program that displays your name and address on the screen as if it were a letter. Your output should look something like that below.

```
+-----+
                                     #####
                                     #####
                                     #####
                                     +-----+

                        Biswanath Das
                        H.N: 105, Barramunda
                        Bhubaneswar.
```

```
/*
 * Problem Description:
 */
Package assignment 1 ;
Public class Ques 2 {
    Public static void main (String [ ] args) {
        System.out.println("+-----+");
        System.out.println("#####");
        System.out.println("#####");
        System.out.println("#####");
        System.out.println("Biswanath Das");
        System.out.println("H.N: 105, Barramunda");
        System.out.println("Bhubaneswar");
        System.out.println("+-----+");
    }
}
```

Output

```
#####  
#####  
#####
```

Biswanath Das
H.N: 105, Baramunda
Bhubaneswar

3. Write a java program that displays your name and initials on the screen, in block letters as shown. For example the name Tapan kumare.

A handwritten diagram consisting of two columns of letters. The left column contains eight 'T's, with the bottom-most 'T' colored purple. The right column contains eight 'K's, with the top-most 'K' colored purple. The letters are arranged in a staggered fashion, with the 'T's' on the left and the 'K's' on the right, creating a grid-like structure.

Package assignment -1;

Public class ques 3

$$\{$$

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

```
System.out.println("TTTTTTTTT k k");
```

System.out.println ("T k k");

System. Out. Printin (" T k k ");

System.out.println (" T K K ");

System.out.println (" T K K ");

System.out.println("T k k").

Custom: Brit. Portent (" T K ")

System.out.println("T K K");

System, Out, Printin) (1 K K⁰);

3

3

Output

T T T T T T T T

T

T

T

T

T

T

T

K

K

K

K

K

K

K

K

K

K

K

K

K

K

K

K

4. Write a java program to print
an equilateral triangle using star '*'.

```

      *
     * *
    * * *
   * * * *
  * * * * *
```

```
/*
 * problem Description :
 */
```

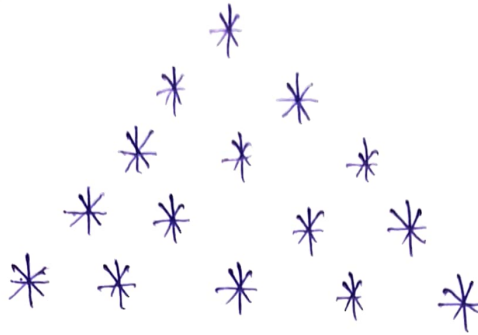
Package assignment - 1;

Public class ques4 {

```
    Public static void main (String[] args) {
        System.out.println ("      *");
        System.out.println ("     * *");
        System.out.println ("    * * *");
        System.out.println ("   * * * *");
        System.out.println ("  * * * * *");
    }
}
```

}

Output



5. Write a java Program that stores your Regd. No and year of admission into two variables, and display their values on the screen.

My Regd. No is 2041018081 and I have taken admission in B.tech in 2020.

```
Package assignment -1;
```

```
Public class ques -5
```

```
{
```

```
Public static void main (String [ ] args)
```

```
{
```

```
int r = 2041018081, y = 2020;
```

```
System.out.println ("My Regd. No is" +  
r + "and");
```

```
System.out.println ("I have taken admission  
in B.Tech in" + y);
```

```
}
```

OUTPUT

My Regd. No is 2041018081 and I have taken admission in B.Tech in 2020.

6. Let we have two values 113, 2.71828. Then declare two different variables to hold the given values. Write the java program to display the values of these two variables on the screen, one per line.

This is room # 113

e is close to 2.71828

Package assignment 1;

Public class ques 6

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

```
        int a = 113 ;
```

```
        double b = 2.71828 ;
```

```
        System.out.println ("This room's #" + a);
```

```
        System.out.println ("e is close to" + b);
```

```
    }  
}
```

OUTPUT

This room is # 113

e is close to 2.71828

7. Write a Java program to exchange the values of two variable of integer type A and B using third temporary variable C.

Package assignment 1;

Public class ques 7

{

public static void main(String [] args) {

int A=10, B=20, C;

System.out.println("The values before swapping
are" + A+B);

C=A ;

A=B ;

B=C ;

System.out.println("The values after swapping
are" + A+B);

}

}

OUTPUT

The values before swapping are 10 20

The values after swapping are 20 10

8. Write a java programme to exchange the values of two variable of integer type A and B without using third temporary variable

Package assignment 1 ;

Public class ques 8

{

Public static void main (String [] args) {

int A=5, B=10 ;

System.out.println("Numbers before swapping =" + A
+ " " + B) ;

A = A+B ;

B = A-B ;

A = A-B ;

System.out.println("Numbers after swapping ="
+ A + " " + B);

}

}

Output

Numbers before swapping = 5 10

Numbers after swapping = 10 5

Q. What do each of the following print?

- a) `System.out.println (2+"bc");`
- b) `System.out.println (2+3+"bc");`
- c) `System.out.println ((2+3)+"bc");`
- d) `System.out.println ("bc" + (2+3));`
- e) `System.out.println ("bc" + 2+3);`

Package assignment 1;

Public class ques a

```
{  
    Public static void main (String[] args){  
        System.out.println (2+"bc");  
        System.out.println (2+3+"bc");  
        System.out.println ((2+3)+"bc");  
        System.out.println ("bc" + (2+3));  
        System.out.println ("bc" + 2+3);  
    }  
}
```

OUTPUT :

2bc
5bc
5bc
bc5
bc23

10. What do each of the following print?
- a. `System.out.println('b');`
 - b. `System.out.println('b' + 'c');`
 - c. `System.out.println((char)('a' + 4));`

Package assignment 1 ;

Public class ques 10

{

Public static void main (String[] args)

{

System.out.println ('b') ;

System.out.println ('b' + 'c');

System.out.println ((char)('a' + 4));

}

}

OUTPUT :

b
bc
e

11. Suppose that a variable `a` is declared as `int a = 2147483647` (or equivalently, `Integer.MAX_VALUE`). What do each of the following print?

- a. `System.out.println(a);`
- b. `System.out.println(a+1);`
- c. `System.out.println(2-a);`
- d. `System.out.println(-2-a);`

Package assignment 1;

Public class ques 11

{

public static void main (String[] args) {

int a = 2147483647;

System.out.println(a);

System.out.println(a+1);

System.out.println(2-a);

System.out.println(-2-a);

System.out.println(2*a);

System.out.println(4*a);

}

OUTPUT:

2147483647

21474836471

-2147483645

2147483647

-2
-4

12. Suppose that a variable a is declared as `double a = 3.14159`. What do each of the following print?

- a. `System.out.println(a);`
- b. `System.out.println(a+1);`
- c. `System.out.println(8/(int)a);`
- d. `System.out.println(8/a);`
- e. `System.out.println((int)(8/a));`

Package assignment 1 ;

```
public class ques12
```

```
{
```

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

```
        double a = 3.14159;
```

```
        System.out.println(a);
```

```
        System.out.println(a+1);
```

```
        System.out.println(8/(int)a);
```

```
        System.out.println(8/a);
```

```
        System.out.println((int)(8/a));
```

```
    }
```

```
}
```

OUTPUT:

3.14159

4.14159

2

2.5464812403910124

2

13) Assume ruler "1", write a program to print following output using String Concatenation (you can take extra variable)

```
1
121
1213121
121312141213121
```

Package assignment 1 ;

```
public class ques13
{
    public static void main (String [ ] args) {
        String ruler1 = "1";
        System.out.println (ruler1);
        ruler1 = ruler1 + "2" + ruler1;
        System.out.println (ruler1);
        ruler1 = ruler1 + "3" + ruler1;
        System.out.println (ruler1);
        ruler1 = ruler1 + "4" + ruler1;
        System.out.println (ruler1);
    }
}
```

OUTPUT:

```
1
121
1213121
121312141213121
```