

Guru Gobind Singh Public School

Sector V,B Bokaro Steel City

Annual IP Assignment Class 11

1. What will be the output of given expression :

```
int a=7;
System.out.println(+a +""+ a-- +"" + a+1 +""+a++);
System.out.println(a);
```

2. public static void main(String ar[])

```
{    int a=0,b=1,c=0;
    System.out.println(a);
    System.out.println(b);
    while(c<=20)
    {
        c=a+b;
        System.out.println(c);
        a=b;
        b=c;
    }
}
```

3. public static void main(String ar[])

```
{    int a=3,b=4,c=1;
    while(b>=1)
    {
        c=c*a;
        b--;
    }
    System.out.println(c);
}
```

4. public static void main(String ar[])

```
{    int n=4368,s=1,r;
    while(n!=0)
    {
        r=n%10;
        s=s+(r*10);
        n=n/10;
    }
    System.out.println(s);
    System.out.println(r);
}
```

5. void main()

```
{
    int a=6,b=7,c;
    c=(a>=b)?a/2:b*2;
    System.out.println(c);
}
```

6. void main()

```
{
    int n=2;
    switch(n)
{
```

```
case 1:  
    System.out.println("One"); break;  
case 2:  
    System.out.println("Two");  
case 3:  
    System.out.println("Three");  
case 4:  
    System.out.println("Four");  
default:  
    System.out.println("Invalid Entry"); break;  
}
```

7. To input three no. and display the highest value.
 8. To input month no. and display month name (using switch).
 9. To input a no and display it in reverse order.
 10. Write a program to check whether a given no is palindrome or not.
 11. Write a program to check whether a number is negative or positive.
 12. Write a program to print series like 0,3,8,15,24 n terms.
 13. To find the sum of series like
$$s = \frac{1}{2} + \frac{3}{4} + \frac{5}{6} + \frac{7}{8} + \dots + \frac{19}{20}$$
 14. Write a program to check whether given no is an Automorphic no or not.
Automorphic No : An automorphic no is the number which is contained in the last digit(s) of its square.
Example : 25 is an automorphic number as its square is 625 and 25 is present as the last two digits.
 - Write a program to check whether given no is BUZZ no or not.
A buzz no is a number which either ends with 7 or divisible by 7.
 - Write a program to sort an array using Bubble sort.
 - Write a program to check whether given no is composite no or not.(A number is said to be a composite , if it has one or more than one factor excluding 1 and the number itself.)
Example : 4, 6, 8, 9
 - Write a program to input a value and display the smallest digit in it.
Example : sample input 5623
Sample output : Smallest digit is 2
 - write a program that encodes a word into Piglatin. To translate word into a piglatin word, convert the word into uppercase and then place the first vowel of the original word as the start of the new word along with the remaining alphabets. The alphabets present before the vowel being shifted towards the end followed by "AY".
Sample input : LONDON Sample output : ONDONLAY
Sample input : OLYMPICS Sample output : OLYMPICSA
 - Write a program to print output like :

1			
2	2		
3	3	3	
4	4	4	4
			1
		2	3
	4	5	6
7	8	9	10
			1
		2	2
	3	3	3
4	4	4	4

23. Write a program to print output like :

```
1
2   1
3   2   1
4   3   2   1
```

24. What is wrong with the following code fragment?

```
switch (x)
{
case 1:
n1= 10;
n2= 20;
case 2:
n3=30;
break;
n4= 40;
}
```

25. What will be the output of the following program code?

```
int m = 100;
int n = 300;
while(++m < --n);
System.out.println(m+" "+ n);
```

26. What does the following fragment display

```
String s = "Six:" + 3+ 3;
System.out.println(s);
```

27. What is the output of the following code?

```
String s = new string();
System.out.println("s = " + s);
```

28. What will be the output of the following code snippet?

```
int x= 10;
int y = 20;
if ((x<y)|| (x=5) > 10)
System.out.println(x);
else
System.out.println(y);
```

29. State the output of the following program:

```
public static void main(String args[ ])
{
int x = 10;
int y = 15;
System.ou.println((x>y)? 3.14: 3);
}
```

30. State the output of the following program:

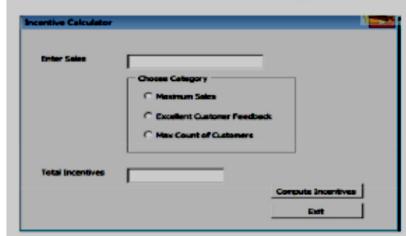
```
public static void main(String args[ ])
{
int x = 10;
float y = 10.0;
System.ou.println((x>y)? true: false);
}
```

31. Create a Java Desktop Application to find the incentive (%) of Sales for a Sales Person on the basis of following feedbacks

Feedback	Feedback Incentive (%)
Maximum Sales	10
Excellent Customer Feedback	8
Maximum Count Customer	5

Note: that the sales entry should not be space.Calculate the total incentive as :Sales amount* Incentive. The feedback will be implemented in JCheckBox controls.Using a JButton's (Compute Incentive) click event handler,display the total incentives in a JTextField control. Assume the nomenclature of the swing components of your own.

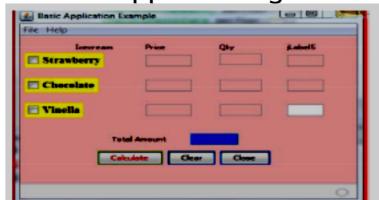
Note that the JFrame from IDE window will be shown as given:



32.Assume the following interface built using Netbeans used for bill calculation of a ice-cream parlor. The parlor offers three verities of ice-cream – vanilla, strawberry, chocolate. Vanilla icecream costs Rs. 30, Strawberry Rs. 35 and Chocolate Rs. 50. A customer can chose one or more ice-creams, with quantities more than one for each of the variety chosen. To calculate the bill parlor manager selects the appropriate check boxes according to the verities of ice-cream chosen by the customer and enter their respective quantities.

Write Java code for the following:

- On the click event of the button 'Calculate', the application finds and displays the total bill of the customer. It first displays the rate of various ice -creams in the respective text fields. If a user doesn't select a check box, the respective ice-cream rate must become zero. The bill is calculated by multiplying the various quantities with their respective rate and later adding them all.
- On the Click event of the clear button all the text fields and the check boxes get cleared.
- On the click event of the close button the application gets closed



33.Read the following case study and answer the questions that follow. TeachWell Public School wants to computerize the employee salary section. The School is having two categories of employees : Teaching and Non Teaching. The Teaching employees are further categorized into PGTs, TGTs a nd PRTs having different Basic salary.

The School gives addition pay of 3000 for employees who are working for more than 10 years.

Employee Salary Sheet				
Basic Salary	Gross Salary	Employee category		
Deductions	Net Salary	<input type="radio"/> Non Teaching <input checked="" type="radio"/> PGT <input type="radio"/> TGT <input type="radio"/> PRT	<input type="checkbox"/> More than 10 years	
<input type="button" value="Calculate"/> <input type="button" value="Clear"/> <input type="button" value="Exit"/>				
Employee Type	Basic Salary	DA (% of Basic Sal)	HRA (% of Basic Sal)	Deductions (% of Basic sal)
Non Teaching	12500	31	30	12
PGT	14500	30	30	12
TGT	12500	21	30	12
PRT	11500	20	25	12

- Write the code to calculate the Basic salary, deductions, gross salary and net salary based on the given specification. Add 3000 to net salary if employee is working for more than 10 years.

$$\text{Gross salary} = \text{Basic salary} + \text{DA} + \text{HRA}$$

Net salary = Gross salary – deductions

(b) Write the code to exit the application. (c) Write the code to disable textfields for gross salary, deductions and netsalary.

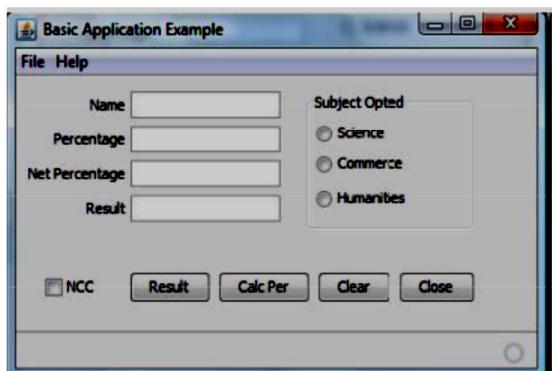
34. ABC School uses the following interface built in java to check the eligibility of a student for a particular stream from science, commerce and humanities. The user first enters the total percentage and selects the desired stream by selecting the appropriate option button. An additional 5% is marks is given to students of NCC. Write Java Code for the following

a. On Action event of the button 'Calc Percentage' Net percentage of the student is calculated and displayed in the appropriate text filed. Net percentage is same as that of the actual percentage if the student doesn't opts for NCC otherwise 5% is added to actual percentage.

b. On Action event of the button 'Result', the application checks the eligibility of the students. And display result in the appropriate text field. Minimum percentage for science is 70, 60 for commerce and 40 for humanities.

c. On the Click event of the clear button all the text fields and the check boxes get cleared.

d. On the click event of the close button the application gets closed.



35. What will be the output of the following code

```
StringBuffer city = new StringBuffer("Madras");
StringBuffer string = new StringBuffer();
string.append(new String(city));
string.insert(0,"Central");
string.out.println(string);
```

36. Give the output of the following program:

```
classMainString
{ public static void main( String ahrs[])
{ StringBuffer s = new StringBuffer("String");
if(s.length() > 5) && (s.append("Buffer").equals("x"));
System.out.println(s);
}
}
```

37. What is the output of the following code fragment if "abc" is passed as argument to the func()?

```
Public static void func(string s1)
{
String s = s1 + "xyz";
System.out.println("s1=" + s1);
System.out.println("s = " +s);
}
```
