

WarmUps

- Write a Program to print "This is my First Java Program" without using a variable.
- Store your name in a variable and print your Name in capital Letter.
- Take user input for name and convert the name to small letter.
- Get two no from user and print the sum of those numbers.
- Create a Class Calculator which has functions like add, mul, sub and div. All the methods should return int after calculation.
Create a Calculator Main class from where you should call those methods.

Ui should look like this

1. Add
2. Sub
3. Mul
4. Div
5. Quit

Start:

1. Write a Java program to print the following string in a specific format

```
Twinkle, twinkle, little star,  
    How I wonder what you are!  
        Up above the world so high,  
        Like a diamond in the sky.  
Twinkle, twinkle, little star,  
    How I wonder what you are
```

2. Write a Java program to print the area and perimeter of a rectangle.

Note: Width=user Input and Height=user Input

3. Write a Java program to swap two variables. Write a function doSwap() to perform it.

Note: a=2, b=3, then after swapping a=3, b=2

4. Write a Java program to compute the area of a hexagon.

$$Area = (3 \sqrt{3}(n)^2) / 2$$

6. Write a Java program to print numbers between 1 to 100 which are divisible by 3, 5 and by both.

Divided by 3 & 5:
15, 30, 45, 60, 75, 90,

☆ ☆ ☆ ☆ ☆ ☆ =====
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```

* * * * * =====
=====
=====
=====
=====
=====
=====
=====

```

10. Write a Java program to print a face.

Expected Output

```

+ " " " " +
[ | o o | ]
  | ^ |
  | '-' |
+-----+

```

11. Write a Java program to Convert Seconds to H:M:S ?

Note: take second as input from user

12. Write a Java program to find Fibonacci Series from 1 to 100 ?

13. Find Factorial of a given No.

Note: factorial of n ($n!$) = $1 * 2 * 3 * 4 * \dots * n$

14. Find if a given year is a leap year ?

Note: Year must be divided by 4 or if it ends with 00, then should be divided by 400 exactly.

15. Write a Java Program to display Multiplication Table of given No ?

16. Write a Java Program to Find the Sum of given no?

Eg: $2+5+8 = 15$

17. Write a Java program that accepts four integer from the user and prints equal if all four are equal, and not equal otherwise.

18. Write a program in Java to input 10 numbers from keyboard and find how many are odd, even no and then their sum and average.

19. Write a Program to input user request to print how many stars they want and print below format.

Eg: user input is 4

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

20. Write a Program to input user request to print how many stars they want and print below format with first *, then # and ^^ pattern following the list.

Eg: user input 5

```
*  
  
##  
  
^^^  
  
****  
  
#####
```

21. Write a program in Java to display the pattern like a diamond. Take user input for half of diamond size.

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

```

* * * * *
* * * * *
* * * * *
* * * *
* * *
*

```

22 . Write a Java program that keeps a number from the user and generates an integer between 1 and 7 and displays the name of the weekday.

Eg: 6= Friday, 2 = Monday

23. Write a Java program that takes the user to provide a single character from the alphabet. Print Vowel or Consonant, depending on the user input. If the user input is not a letter (between a and z or A and Z), or is a string of length > 1, print an error message.

Eg: E = vowel, Z= Vowel, AB= "Not Matched"

24. Write a Java program to create a console App for Restaurant.

How many Items? 3

Enter price for Item1: 20

Enter price for Item2: 50

Enter price for Item 3: 100

Now, Display below

Your bill

Price : 100

Tax= 5% of bill= 5

Please enter tips? (user can input or skip the option), if hits enter skip , else get the tips amount e

Your total bill is = 100+5 + tips?

25. Gender Percentage in a Class

How many Student in a class= 30

How many Male=10, auto find the female count

Then report:

We have % Male, % Female in this class