

# YUVASHAKTHI\_JAVA\_LEARNING PATH

## 1. Basic arithmetic operations(+,-,\*,/,%)

- Exercises-Area & perimeter of Different shapes.

## 2. Command Line argument method

- Exercises-Area & perimeter of Different shapes.

## 3. Exercises

### 1. Swapping(Total 5logics)

- Swapping of 2 numbers with 3<sup>rd</sup> variable.
- Swapping of 3 numbers with 4<sup>th</sup> variable.
- Swapping a&b without using 3<sup>rd</sup> variable(by arithmetic).
- Swapping a,b,c without using 4<sup>th</sup> variable(by arithmetic).
- Other 3 logics.

### 2. Reverse a number(3Logics)

### 3. Write a program to get input from user and print sum & product of them &

- Print both output by using single output line

### 4. Ask user to give two double input for length and breadth of a rectangle and print area type casted to integer.

#### 4. Interactive method

By using try catch exception method

Exercises

- 1) Basic arithmetic operations
- 2) Finding remainder without using module operator.
- 3) Get student details&marks as input and show Total& avg marks.

#### 5. Relational operators.

- Less than
- Less than equal to
- Greater than equal to
- Greater than
- Equals to
- Not equals to

#### 6. Logical operators

- And && (Executed only when both conditions satisfied)
- Or !! (Any one condition is true)
- Not ! (given condition false)

#### 7. Multiple Assignment operators

- a=b=c=10

#### 8. Other special assignment operators

- a+=10
- a-=10
- a\*=10
- a/=10
- a%=10

## 9. Conditional statements

- if
- if-else
- if-else ladder
- Nested if

Study flowchart of every statement

## 10. if Exercises

- [1] Check a is greater than b
- [2] Check a is less than b
- [3] Check number is positive or negative or neutral
- [4] Check a is even or odd
- [5] Biggest of 3 numbers
- [6] Smallest of 3 numbers
- [7] Check person is Eligible to vote or not

## 11. if-else Exercises

- [1] Biggest of 2 numbers
- [2] Smallest of 2 numbers
- [3] Check number is positive or negative or neutral
- [4] Check given Number is even or odd
- [5] Check person is Eligible to vote or not

## 12. if-else ladder

- [1] Biggest of 2 numbers
- [2] Smallest of 2 numbers
- [3] Check given number is positive or negative or neutral
- [4] Find given age of the person is child or adult or senior citizen
- [5] If input is 1- print addition of 2nos,if 2- sub,if 3- multi,if 4-division,if 5-modulus or remainder.
- [6] If input is given as (+) do addition of 2nos,if (-) do sub,if (\*) do multi,if (/) do division,if (%) modulus or remainder.
- [7] Get temperature value from user & display a suitable message .
- [8] Print equivalent description for grades what students got.
- [9] Print equivalent day for a given number
- [10] Print equivalent month for a given number
- [11] Print no.of days of a given month(month recognized by its number)
- [12] Print Student grade for a subject(Excellent-E,v.good-V).
- [13] To find given character is vowel or consonant
- [14] EB-bill calculator
- [15] Write a program to findout the commission amount.

### 13. Nested-if

- [1] Biggest of 3 number
- [2] Smallest of 3 number
- [3] Leap year
- [4] Student marks-Grade

### 14.Un-conditional statement

- Switch case (default)

Study flowchart of switch case

### 15.Switch-Exercices

- [1] Program to print days in words
- [2] Program to calculate deg celcius,Fahrenheit,Kelvin
- [3] Program to print entered number in words
- [4] Program for calculator  
function(1=add;2=sub;3=multi;4=div;5=Modulus)
- [5] Program for calculator function(+=add;-  
=sub;\*=multi;/=div;%=Modulus)
- [6] Vowel or consonant
- [7] Calculate SI & CI
- [8] Print total num of days in a month.

## 16.Operators

- Post-Increment operator(i++)
- Post-Decrement operator(i--)
- Pre-Increment operator(++i)
- Pre-Decrement operator(--i)

Practice operators manually.

## 17.Control statements

- [1] while
- [2] do-while
- [3] for loop

## 18. while ,do-while & for loop Exercises

- [1] Print natural numbers
- [2] Print odd natural numbers
- [3] Print even natural numbers
- [4] Print natural numbers in reverse order
- [5] Print odd natural numbers in reverse order
- [6] Print Even natural numbers in reverse order
- [7] Multiplication table
- [8] Sum of 'n' natural numbers
- [9] Factorial of a given number
- [10] To add odd numbers bet a given input
- [11] To add odd numbers bet a given input
- [12] Add square of all num bet given input
- [13] Add square of all Odd nums bet given input
- [14] Add square of all Even nums bet given input
- [15]  $1!+2!+3!+.....+n!$

- [16]  $1!+3!+5!+.....+n!$
- [17]  $2!+4!+6!+.....+n!$
- [18]  $(1/1!)+(1/2!)+(1/3!)+.....+(1/n!)$
- [19]  $(1/1!)+(1/3!)+(1/5!)+.....+(1/n!)$
- [20]  $(1/2!)+(1/4!)+(1/6!)+.....+(1/n!)$
- [21]  $(1/1^2)+(1/2^2)+(1/3^2)+.....+(1/n^2)$
- [22]  $(1/1^2)+(1/3^2)+(1/5^2)+.....+(1/n^2)$
- [23]  $(1/2^2)+(1/4^2)+(1/6^2)+.....+(1/n^2)$
- [24] Cube of n numbers till n?
- [25] Perfect number
- [26] Reverse a number
- [27] Prime num
- [28] Adam number
- [29] Prime adam number
- [30] Biggest of n number
- [31] To print each character in entered string
- [32] Print numbers from -10 to -1
- [33] Print count no of digits in a number
- [34] Print sum of digits of number
- [35] Sum of n numbers
- [36] Print product of digits of numbers
- [37] Smallest of n numbers
- [38] Sum of odd n numbers
- [39] Sum of even n numbers
- [40] Sum of n numbers and average
- [41] Fibonacci series
- [42] Armstrong number

- [43] Palindrome num
- [44] Convert given number from decimal to binary?
- [45] Convert given number from decimal to octal?
- [46] Convert given number from decimal to hexadecimal?
- [47] Convert given number from binary to decimal?
- [48] Convert given number from binary to octal?
- [49] Convert given number from binary to Hexadecimal?
- [50] Convert given number from octal to decimal?
- [51] Convert given number from octal to Hexadecimal?
- [52] Convert given number from octal binay?
- [53] Convert given number from Hexadecimal to decimal?
- [54] Convert given number from Hexadecimal to binary?
- [55] Convert given number from Hexadecimal to octal?
- [56]
- [57]
- [58]
- [59]