Assignmen 1

1. Check if the given number is Even or Odd

Step 1 - start the program

Step 2 - Read / input the number.

Step 3 - if n%2 = 0 then number is even

Step 4 - else number is odd

Step 5 - Display the output

Step 6 - Stop the program

2. a java program to find the factorial of given number.

Step 1 - start the program

Step 2 - Declare variable n, fact, i

Step 3 - Take input from user

Step 4 - Initialize variable fact = 1 & i = 1

Step 5 - Repeat until i<= number
fact = fact x i
i = i+1

Step 6 - Print fact

Step 7 - stop the program

3 Find factorial of a number using Recursion

Step 1 - Start the program

Step 2 - Enter the number.

Step 3 - if n = 1 then
Return 1
else
Return n x factorial (n-1)

Step 4 - set f <- 1
IF n≠0 then
set f = factorial (n)

Step 5 - Print factorial

Step 6 - stop the program.

4 Swap two numbers without using the third variable approch

step1 - stort the program

Step 2 - Enter the numbers num1 & num2

step3 - point the numbers num1 & num2

Step 4 - num1 = num1 + num2

Step 5 - num2 = num1 - num2

Step 6 - num1 = num1 - num2

Step 7 - Print the values of num1 & num2

Step 8 - Stop the program.

5 How to check whether given number is positive or negative in Java.

Step 1 - Start the program.

Step 2 - Enter the number

Step 3 - if number > 0 : is positive

Step 4 - else if number < 0 is negative.

Step 5 - else if number = 0 is neither negative nor positive.

Step 6 - Print result

Step 7 - End the program

6 Write a java program to find whether a given number is leap year or not.

Step 1 - Start the program

Step 2 - Enter the year

Step 3 - Check if year is divisible by 4 but not 100 or check if year is divisible by 400
Print Leap year

step 4 - else print non-leap year

step 5 - Stop the program.

7 Write a Java program to print 1 to 10 without using loop.

Step 1 - start the program.

Step2 - Declare n = 1

Step 3 - Print n
if (n<=10)
n+1

Step 4 - Stop the program

11 Write a program to find the smallest of 3 numbers (a,b,c)

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Step 1 - Start the program

Step 2 - Enter number a, b, c

Step 3 - (a<b ? (a<c ? a:c) : (b<c ? b:c));

Step 4 - print smallest number

Step 5 - End the program

12 How to add two numbers without using arithmatic operator in java.

Step 1 - Start the program

Step 2 - Enter number a, b

9 Write program to print all factors of given number

Step 1 - Start the program

Step 2 - Declare variable i & n as integer

Step 3 - Enter number n

Step 4 - for(i = 1, i<= n/2, i++)

step 5 - if n%. i == 0

Step 6 - print i

step 7 - stop the program.

10 Write a program to find sum of digits of given number

Step 1 - Start the program

Step 2 - Enter the number n

step 3 - Print remainder of the number.
m = n%.10

step 4 - Sum = Sum + m

step 5 - Divide number by 10
n = n/10

step 6 - Repeat step 3 while number is greater than zero

step 7 - Print Sum

step8 - stop the program

13 Write program to reverse given number.

step 1 - start the program

step 2 - Enter the number.

Step 3 - ~~Ste~~ set rev = 0

Step 4 - if n>0

Step 5 - rev = (rev x 10) + (n % 10)
n = n / 10

Step 6 - print reverse number stored in rev

Step 7 - stop the program

14 Write Java program to find GCD of two given numbers

17 Check whether the given number is palindrome or not.

Step 1 - start the program

Step 2 - Enter the number

Step 3 - Store the number in temporary variable

Step 4 - Reverse the number

Step 5 - compare temporary number & reverse number

Step 6 - if same print Palindrome number

Step 7 - else print not palindrome number

18 Write program to print all the prime factors of given number

Step 1 - start the program

Step 2 - Enter number n

Step 3 - check if n has 2 prime factors
Divide n/2 check remainder is 0

Step 4 - check for odd prime factors of n
Divide n/3 check remainder is 0

Step 5 - n is greater than 2 then n is a prime number with a power of 1

Step 6 - Print factors

Step 7 - stop the program

19 To print the series even number 2, 4, 6, 8, 10, 12, 14

Step 1 - start the program

Step 2 - Initialize n=2

Step 3 - while n<=100
n = n+2

Step 4 - Print n

Step 5 - stop the program

20 To print the series odd number 1, 3, 5, 7, 9, 11, 13.

Step 1 - start the program

Step 2 - i = 1

Step 3 - i % 2 != 0

Step 4 - Print i

Step 5 - i++

Step 6 - Stop the program.

15 Write a program to find LCM of two given numbers.

Step 1 - start the program

Step 2 - Initialize A & B

Step 3 - Store the common multiple of A & B in max variable

Step 4 - Check the max is divisible by both A & B

Step 5 - If max is divisible. Print max as LCM of two numbers

Step 6 - Else increase value of max & repeat step 4

Step 7 - Stop the program