

# Looping

1. WAP to print the factor of the number.
2. WAP to print the sum of factors of a number.
3. WAP to print the odd factors of the number.
4. WAP to print the even factors of the number.
5. WAP to print the sum of even factors of a number.
6. WAP to find the sum of odd factors of a number.
7. WAP to input a number and check whether it's a perfect number or not.

*(Sum of factors of a number excluding the number is equal to the number. ex 6*

*Factors of 6=1,2,3*

*sum of factors=1+2+3=6 which is equal to the number.*

*).*

8. WAP to input a number and check whether a number is prime or not.

*(Number which has two factors 1 and number itself.)*

9. WAP to print all the factors which are prime.
10. WAP to count all even factors of a number.
11. WAP to count all odd factors of a number.
12. WAP to count the number of prime factors of a number.
13. WAP to find the LCM and HCF of a number.
14. WAP to find the factorial of number.
15. WAP to input two numbers x and y and find  $x^y$ .

16. WAP to input the number and count its digits.
17. WAP to input a number and reverse it.
18. WAP to input a number and check whether it is palindrome or not.  
(A palindrome number is a number which is the same when written in forward or backward e.g. 121)
19. WAP to input a number and print sum of digits of a number.
20. WAP to input a number and the sum of first and last digit of the number.
21. WAP to input a number and print the prime digits of the number.
22. WAP to print the square of each digits of the number.
23. WAP to print the cube of each digits of number.
24. WAP to print the factorial of each digits of number.
25. WAP to find the sum of even digits of a number.
26. WAP to count how many odd digits in number.
27. WAP to count how many prime digits in number.
28. WAP to count even digits of the number.
29. WAP to count odd digits of the number.
30. WAP to count prime digits of the number.
31. WAP to find the sum of square of each digits of a number.
32. WAP to find the sum of cube of each digits of a number.
33. WAP to find the sum of factorial of each digits of a number.
34. WAP to find the sum of cube of even digits of number.
35. WAP to find the sum of odd digits of a number.
36. WAP to print the factors of each digits of a number.
37. WAP to input a number and find the smallest digit of a number.  
(without array)

38. WAP to input a number and find the largest digit of a number (without array).
39. WAP to input a number and print the average of digits.
40. WAP to input a number and print the average of even digits.
41. WAP to input a number and print the average of odd digits.
42. WAP to take a number and check whether it is Armstrong no. or not.

*(In case of an Armstrong number of 3 digits, the sum of cubes of each digit is equal to the number itself. For example:*

*153 = 1\*1\*1 + 5\*5\*5 + 3\*3\*3 // 153 is an Armstrong number.*

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43. WAP to input a number and print the smallest number which can be formed from that number  
(input: 153 output: 135  
input: 1820 output: 1028

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44. WAP to input a number and print the largest number which can be formed from that number  
(input: 153 output: 531  
input: 1820 output: 8210

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45. WAP to input a number and check whether it is automorphic or not.  
(A number whose square "ends" in the same digits as the number itself. For example,  $5^2 = 25$ ,  $6^2 = 36$ )



46. WAP to input a number and check whether it is Magic or not.

(Number= 1234

=>  $1+2+3+4=10$

=>  $1+0=1$

*This is a Magic Number)*

47. WAP to input a number and print frequency of each digit of a number.

48. WAP to print all the prime numbers between 1 to n.

49. WAP to print all the perfect numbers between 1 to n.

50. WAP to print all Armstrong numbers between 1 to n.

51. WAP to print all Magic numbers between 1 to n.

52. WAP to print all Pythagorean triplets between 1 to n

*(sum of square of two successive nos is equal to the third one.*

*ex:  $3^2+4^2=5^2$*

*)*

53. WAP to input a number and print its prime factorization.

54. WAP to print the cube of all non-prime numbers till x.

55. WAP to print all the non-perfect numbers till x.

56. WAP to input a number and count how many zero's are there.

57. Print the table of a number till 20.

58. WAP to input a number and check whether it is special or not.

(n=145

$1!=1$

$4!=24$

$5!=120$

$1+24+120=145$

*so 145 is special number)*

59. WAP to input a number in Decimal and print its Hexa-Decimal equivalent

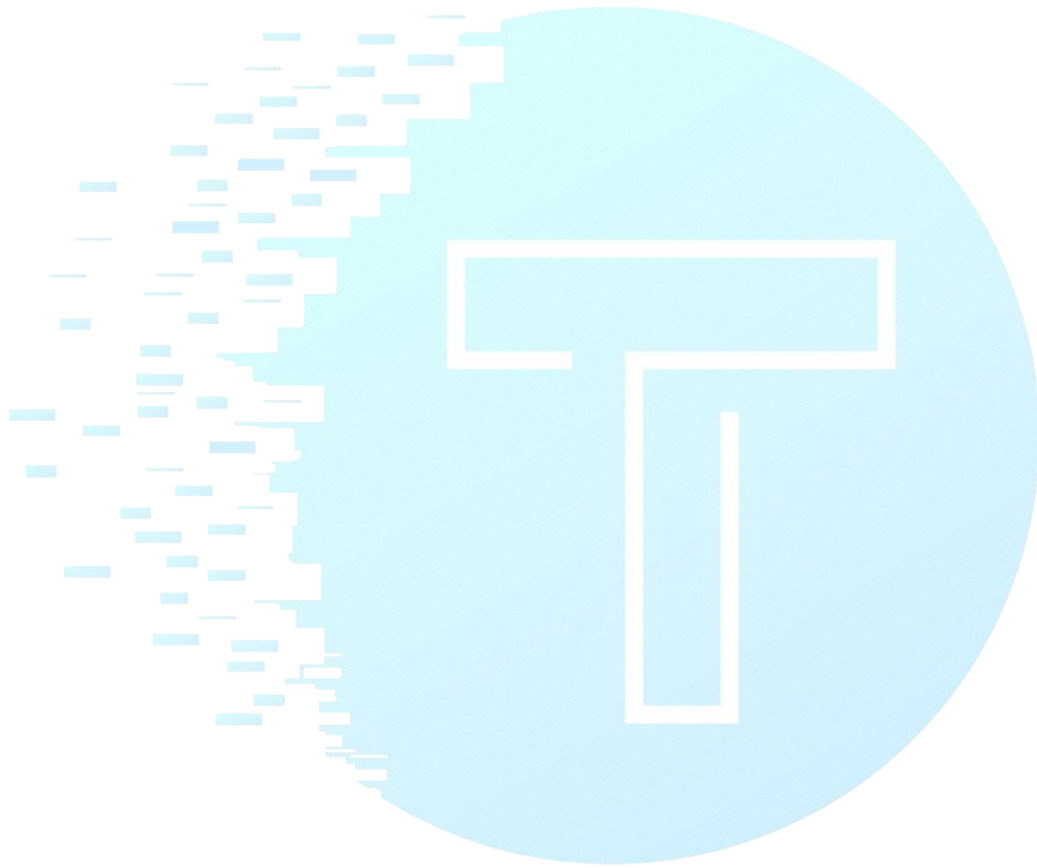
*(input:235, output: EB)*

60. Write a program in java to enter a number and check whether the number is **Emirp** number or not.

*(An Emirp number is a number which is prime backwards and forwards.*

*Example: 13 and 31 are both prime numbers. Thus, 13 is an emirp number. 37 and 73 is another example.)*

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# TechSoft INDIA