## 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<sup>≠</sup>

- 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 take a number and arrange the digits in ascending order.
- 40. WAP to take a number and arrange the digits in descending order.
- 41. WAP to input a number and print the average of digits.
- 42. WAP to input a number and print the average of even digits.
- 43. WAP to input a number and print the average of odd digits.
- 44. 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:

)

45. WAP to input a number and print the smallest number which can be formed from that number

(input: 153 ou<mark>tput: 135</mark>

input:1820 output:1028

)

46. 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

153 = 1\*1\*1 + 5\*5\*5 + 3\*3\*3

// 153 is an Armstrong number.

47. 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,  $5_2 = 25$ ,  $6_2 = 36$ )

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

(Number= 1234

This is a Magic Number)

- 49. WAP to input a number and print frequency of each digit of a number.
- 50. WAP to print all the prime numbers between 1 to n.
- 51. WAP to print all the perfect numbers between 1 to n.
- 52. WAP to print all Armstrong numbers between 1to n.
- 53. WAP to print all Magic numbers between 1 to n.
- 54. WAP to print all Pythagorean triplets between 1 to n

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

- 55. WAP to input a number and print its prime factorization.
- 56. WAP to print the cube of all non-prime numbers till x.
- 57. WAP to print all the non-perfect numbers till x.
- 58. WAP to input a number and count how many zero's are there.
- 59. Print the table of a number till 20.
- 60. WAP to input a number and check whether it is special or not.

$$(n=145)$$

