

QUIZZES :

- 1- Calculate the factorial of a given number
 - 2- Find the total numbers of the prime numbers between 1 and n
 - 3- Reverse a number then find the difference between the entered number and the resulted one.
i.e 12345 ↳ 54321 54321-12345
 - 4- Check if the number is mirrored around the middle digit or not
i.e 12321
 - 5- Convert from binary to decimal and vice versa (8 digits)
 - 6- Convert from binary to octal and vice versa (8 digits)
 - 7- Convert from binary to BCD (i.e 10001001 ↳ 89 and vice versa
 - 8- Convert from octal to hexadecimal
 - 9- Convert from binary to hexadecimal and vice versa
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- 10- Sum of all numbers from 1 to n
 - 11- Sum of all odd numbers from 1 to n
 - 12- Product of all even numbers from 1 to n (n <100)
 - 13- Find the number of digits which are divided by 5 or 7 between 1 and n
i.e) if n = 15
numbers is 5,7,10,14,15.
 - 14- Between 1 and 10
find the number of pair of digits that the sum of their product is less than their sum
i.e) $5 * 4 = 20$
The sum of their product is $2+0 = 2$
their sum is $5+4$
 - 15- Find the GCD(Greatest Common Divisor) of a pair of elements such that it is maximum among all possible pairs. GCD(a, b) is **the maximum number x such that both a and b are divisible by x**.
 - 16- Ask the user to enter a number “n” , then identify its number of digits then check if the original number “n” is divisible by each digit or not.
i.e) 4568
it consists of 4 digits which are (4,5,6,8)
The number 4568 is divisible by 4 and 8 .
 - 17- Construct Fibonacci series (1,1,2,3,5,8,13,...), each term is the sum of the previous two terms
 - 18- Construct this series (0,1,1,2,4,7,13,24,44,81), each term is the sum of the previous three terms

Code from binary to decimal and vice versa.

```
#include <stdio.h>
#include <stdlib.h>
#include <math.h>
int main()
{ int x =00000,result=0;

    // from binary to decimal
    printf("enter the binary number !\n");
    scanf("%d",&x);
    for (int i=0;i<8;i++)
    {
        result=result+(x%10)*pow(2,i);
        x= x/10;
    }
    printf(" the decimal number is %d \n",result);

    // form decimal to binary
    printf("\n n ter the decimal number !\n");
    scanf("%d",&x);
    result=0;
    for (int i=0;i<8;i++)
    {
        result=result+(x%2)*pow(10,i);
        x= x/2;
    }
    printf(" the decimal number is %d",result);

    return 0;
}
```