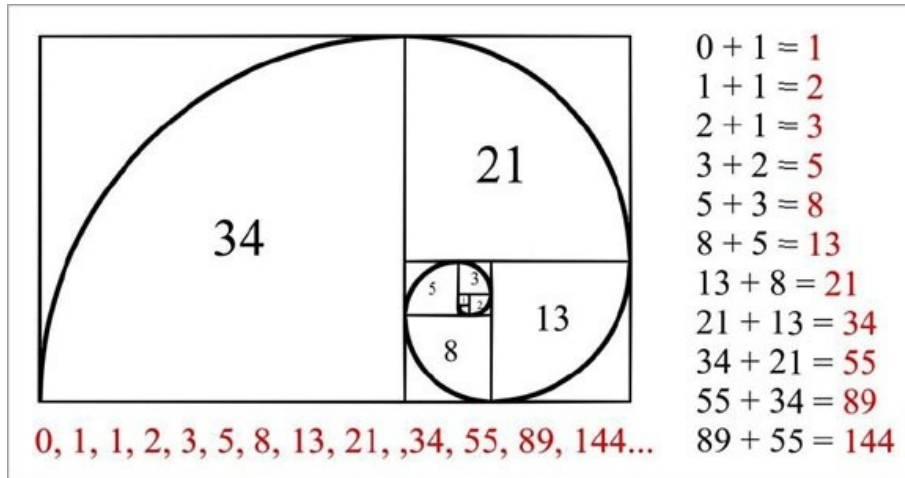


# Intr. To Prog. Language (C)

## Exercises

**30.10.2018**

1. Write a program that takes a number and create a Fibonacci series until that number.



2. Write a program that takes a number and create combinations of n-pairs of parentheses:  
Input:3 output: ()()(), ()(()), ((())), (((()))
3. Write a program that takes a number and calculate number of ways of representing n TL with 25Kr, 10Kr, 5Kr.
4. Write a program that takes a number and calculate all prime numbers until that number. (Find the optimum solution)
5. Swap two variables without using temporary variable.  
Initial values: a=5, b=3; output values: a=3, b=5
6. Find the maximum of two numbers without using any if-else or comparison operator.
7. Write a program that takes a number of rows of upper triangle and draw a diamond from '\*'.  
Input:2 output: \*\*\*

\*

Input:2 output: \*\*\*

\*

8. Write a calculator program that only use '+' operator but

9. Convert given “if-else” statement to “switch-case”.

```
if (x == 3)
    printf("%c\n", 'A');
else if (x == 7 || x == 8)
    printf("%c\n", 'B');
else if (x == 12)
    printf("%c\n", 'C');
else
    printf("%c\n", 'D');
```

10. Convert given “for” loop to “while” loop.

```
for ( i = 0; i < 100; i++ )
{
    if ( i % 10 == 0 )
    {
        printf("\n");
    }
    total = total + i;
    printf("%d ", n);
}
```