Programming Fundamentals - II using Python 🐍

Lecture

Problem Solving Practice

- break & continue
- branching
- looping
- coding problems

Loops

Do something again & again!

break

continue

pass

return

~~Switch~~ Match Case

in Python 3.10 or higher

```java
class HelloWorld {
    public static void main( String args[] ) {

      int weather = 2;
      //passing variable to the switch
      switch (weather)
      {
          //comparing value of variable against each case
        case 0:
          System.out.println("It is Sunny today!");
          break;
        case 1:
          System.out.println("It is Raining today!");
          break;
        case 2:
          System.out.println("It is Cloudy today!");
          break;
        //optional
        default:
          System.out.println("Invalid Input!");
    }
    }
}
```

https://www.pythonpool.com/match-case-python/

No ~~Do While~~ Loop

Code Demo!

Number Sum

Find the sum of even numbers from 1 to N using for loop.

Example

N = 4

Output

10

Triangle Pattern

Print the given Pattern.

Example

N = 4

Output

```
*
**
***
****
```

Half Diamond

Print the pattern for given N.

Example

N = 3

Output

```
  *
 ***
*****
```

Largest Number

Given N numbers, find the largest number.

Sample Input

N = 7

10, 20, 30, 400, 50, 20, 70

Sample Output

400

Print all Primes

Given a and b, print all primes in the range [a,b]

Input

1 10

Output

2,3,5,7

Count Digits

Given a integer, count the digits

Input

215

Output

3

Time To Try!

8 Mins

Reverse a Number

Given a integer, reverse the number.

Input

215

Output

512

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