

# CS 115 - Introduction to Programming in Python

## Lab 03

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### Lab Objectives: Functions

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1. Write a program that inputs information about a composer, in the format:  
`Composer Name(birthyear-deathyear)`. If the composer is living, there will be no death year (`Composer Name(birthyear-)`). Using the functions described below, your program should input the composer information and display the name and age of the composer.
  - `get_birth`, that accepts a composer string and returns the integer birth year.
  - `get_death`, that accepts a composer string and returns the integer death year. If there is no death year, the function should return the current year. To find the current year, you can use the `now` function of a `datetime` object in the `datetime` module: `current = datetime.datetime.now()`. The `current` object is a `datetime` object, with an attribute, `year` (`current.year`).
  - `get_age`, that accepts a composer string and returns the age of the composer (either at death or according to the current year if they are still living).
  - `get_name`, that accepts a composer string and returns the composer name.

#### Sample Runs:

```
Enter composer information: Mozart(1756-1791)
Mozart's age: 35
```

```
Enter composer information: Fazıl Say(1970-)
Fazıl Say's age: 54
```

2. Write a program to print twin primes less than 1000. If two consecutive odd numbers are both prime then they are known as twin primes. Using the functions described below, your program should input an integer number and display all twin numbers less than that number.
  - `checkPrime`, that accepts an integer `n` and returns **True** if `n` is a Prime number, otherwise it returns **False**.
  - `twinPrime`, that accepts an integer `max_num` and displays all twin primes less than `max_num`.

#### Sample Run :

```
Enter an integer number: 200
Twin Primes less than 200:
```

```
3 and 5
5 and 7
11 and 13
17 and 19
```

29 and 31  
41 and 43  
59 and 61  
71 and 73  
101 and 103  
107 and 109  
137 and 139  
149 and 151  
179 and 181  
191 and 193  
197 and 199