

CIS468 Python Lab 1– Finding Twin Primes

Program Requirements

1. Read a single integer, `n`, from `stdin`
2. Calculate the number of Twin Prime pairs between 1 and `n`
3. Print the result to `stdout`
4. Comments where necessary
 - a. Points will be taken for very poorly commented code

Make sure you do your own testing before submitting your assignment.

Twin Primes

A twin prime is a prime number that differs from another prime number by exactly two. For example, there are 8 prime pairs between 1 and 100.

(3, 5) | (5, 7) | (11, 13) | (17, 19) | (29, 31) | (41, 43) | (59, 61) | (71, 73)

Submission Requirements

1. Submit the `.py` file to the d2l dropbox by the deadline on the dropbox
2. Push your `.py` file to your Gitlab repository by the deadline on the dropbox
3. Add a short readme to your repository

Example

```
$ python twin_prime.py
Enter number: 100
Result: 8
```

Code Skeleton

```
#!/usr/bin/env python
def isPrime(a):
    # This function should take a single parameter
    # and return True if a is prime or False if a is not
    # prime.
    prime = False
    # .. prime test algorithm here ..
    return prime

def main():
    # This function should read a number, n, from stdin
    # and print the number of Twin Prime pairs between
    # 1 and n.
    # .. read from stdin ..
    # .. determine number of twin prime pairs
    # .. print out result ..

# Don't worry too much about the following code. All it does
# is call main when the script is ran from the command line.
# It will be explained in detail once we begin writing more
robust
# scripts.
if __name__ == '__main__':
    main()
```