

IT314 - Software Engineering

Lab 5 - Static Analysis

ID:202001187

Language: Python

Tool: Mypy

1)

git repository:

<https://github.com/jassics/learning-python/blob/master/basic-concepts/2a-while-loop.py>

code:

```
#!/usr/binpython
import random

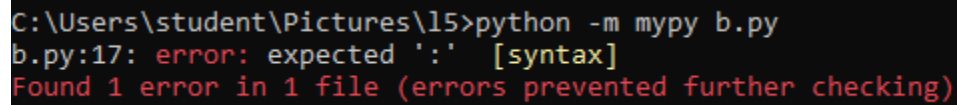
# While loop syntax
# while expression
# statement(s)
# You can use else block with while as well
# while expression
# statement(s)
# else
# statement(s)

guess_num_range = 20
num_to_be_guessed = int(guess_num_range * random.random()) + 1
guess = 0

while guess != num_to_be_guessed:
    guess = int(input('Guess the number '))
    if guess > num_to_be_guessed:
        print('Number is too large')
    elif guess < num_to_be_guessed:
        print('Number is too small')
    else:
        print('Sorry that you\'re giving up!')
```

```
        break
    else
        print(Congratulation. You made it!)
```

Error:



```
C:\Users\student\Pictures\15>python -m mypy b.py
b.py:17: error: expected ':' [syntax]
Found 1 error in 1 file (errors prevented further checking)
```

Here, We have lots of syntax error we can just simply direct it and solve it.

2.

Code:

git repository:

<https://github.com/jassics/learning-python/blob/master/basic-concepts/10-error-handling.py>

```
import requests as req

base_url="https://github.com/"
username = "deepraj1729"

url = base_url+username

#GET request to github for the username
try:
    res = req.get(url)
    if res.status_code == 404:
        print("Error 404. Page not found")
    elif res.status_code == 200:
        print("Status: OK")

except Exception as e:
    print("Unable to establish connection")
    print(e)
```

Error:

```
C:\Users\student\Pictures\l5>python -m mypy a.py
a.py:1: error: Library stubs not installed for "requests" [import]
a.py:1: note: Hint: "python3 -m pip install types-requests"
a.py:1: note: (or run "mypy --install-types" to install all missing stub packages)
a.py:1: note: See https://mypy.readthedocs.io/en/stable/running\_mypy.html#missing-imports
Found 1 error in 1 file (checked 1 source file)
```

Here, error is because of “requests” library is not install, we can install library “requests” and solve it.