## Introduction to programming with Python

## becture 3

Syntax euror: Invalidities in the code's structure.

```
1 print("Hello, World!")
2 try:
3    ddfdfdf # inducing a syntax error
4 except:
5    print(100)
6
Hello, World!
100
```

Value Error: Value doesn't match the expected constraint

1 int("Hello") ValueError: invalid literal for int() with base 10: 'Hello' try except

```
1 try:
2   int("Hello")
3 except ValueError:
4   #this except will only protect against ValueError
5   print("A ValueError occurd")
6 except:
7   #this except will protect against all Error
8   print("Something broke")
9
```

A ValueError occurd

Name Erosox: Occurs when the code attempts to use a variable function that has not been defined or its not accessibble in current scope.

```
>>> print(a)
Traceback (most recent call last):
   File "<stdin>", line 1, in <module>
NameError: name 'a' is not defined
```

## else:

```
try:
    x = int(input("Enter a number x: "))
except ValueError:
print("x is not a number")

else:
    # the else will only occur if except is not activated or any other
### Enter a number x: 56

    x is 56

Enter a number x: 56

    x is 56

Enter a number x: cat
    reprint(f"x is {x}")

    ### Enter a number x: cat
    x is not a number
```

## Pass

```
1 try:
2    x = int(input("Enter a number x: "))
3    except ValueError:
4    # pass does nothing but it is used with except just so
5    # user doesn't see python's error message
6    pass
Enter a number x: cat
```