

## Assignment 3

A.

Write a program with the following:

1. Create a class named Dog
2. Create a constructor (`__init__`)- in class Dog with name and age parameters.
3. Instantiate Dog class from main using constructor (create an object with name and age) call it **rex**.
4. Print **rex** name in main class.

B.

What will be the output of the following program?

```
class ConstructedShark:
    def __init__(self, age):
        self.age = age

def main():
    stevie = ConstructedShark(3)
    print(stevie.age)

if __name__ == "__main__":
    main()
```

C.

Create a program with the following:

1. Class named Car with a static method **start()**
2. Main method which will run **start()** statically

D.

Write a program with the following:

1. Create a class Dog.
2. Create a class "Husky" that inherits class Dog.
3. Add to "Husky" class another method called howl which prints "ahooooo".

E.

1. Create a class BlackHuskey that extends Huskey class.
2. Create a method called return\_color() which returns word black.
3. In your main, create an instance of BlackHuskey class, call howl and return\_color() method.

F.

a. What is the issue with the below code?

```
class Dog:
    def bark(self):
        print(132)

if __name__ == "__main__":
    Dog.bark()
```

b. Suggest a fix

G.

Create a program with the following:

1. Create an array with 3 numbers
2. Iterate through the array to print all elements.
3. Create a list of 3 objects of class dog (each has an age and a name)
4. Iterate through the list and print all dogs names.

Challenge: H.

1. Write the same program as E:
2. Create a class Animal with the function breath()
3. Inherit Animal (as a second class) from class BlackHuskey
4. Call breath() method through an instance of BlackHuskey