## 5.Static

- Define a static variable and access that through a class
- 2. Define a static variable and access that through a instance
- 3. Define a static variable and change within the instance
- 4. Define a static variable and change within the class





```
# 1st program...
 1
2 class MyClass:
        static_variable = 10
3
4
5 -
        def __init__(self):
            self.instance_variable = 20
6
8 -
        def print_variables(self):
            print("Static variable:",
9
                 MyClass.static_variable)
            print("Instance variable:",
10
                 self.instance_variable)
11
12
13
    obj = MyClass()
    obj.print_variables()
14
15
```

Shell



Static variable: 10

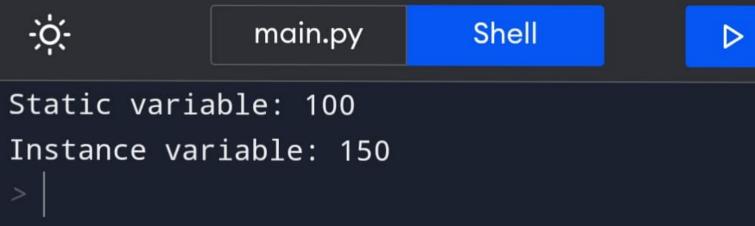
Instance variable: 20

>



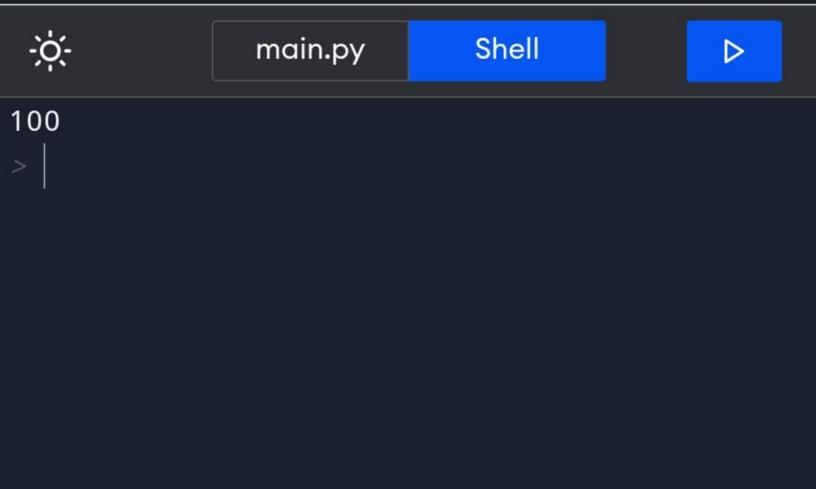
```
-<u>;</u>
```

```
1
    # 2nd program...
2 class MyClass:
        static variable = 100
3
4
        def __init__(self):
5 -
            self.instance_variable = 150
6
7
        def print_variables(self):
8 -
            print("Static variable:",
9
                 MyClass.static_variable)
            print("Instance variable:",
10
                 self.instance_variable)
11
12
    obj = MyClass()
13
    obj.print_variables()
14
15
16
```





```
# 3rd program...
2
3 class MyClass:
        static_variable = 10
4
5
        def __init__(self):
6 -
            self.instance_variable = 20
7
8
        def change_static_variable(self):
9 -
            MyClass.static_variable = 100
10
11
12
    obj = MyClass()
13
    obj.change_static_variable()
14
15
    print(MyClass.static_variable)
16
17
```



## main.py

Shell



```
# 4th program...
2 class MyClass:
3
        static_variable = 10
4
5
        def change_variable(self):
6
            MyClass.static_variable = 20
8
9
    obj = MyClass()
10
    print(MyClass.static_variable)
    obj.change_variable()
11
    print(MyClass.static_variable)
12
13
14
```

