MIDTERM EXAM

Create an account in Github
Create a directory: Python Midterm Examination
Upload all your source code inside the directory
Please include your explanation in the exam, follow instructions provided below.
Clearly explain the function of the source code.
Make sure that the activity is named into your specific activity, example: **Edwin_Pascua_Exam_1.ipynb**

Creating list, f string, append, remove, operators, if condition using python, understand and execute the requirements as stated in the following:

Exam_Part1.ipynb
Run the code and make sure to execute very well. Fin the errors and fix the errors. Explain what was observed during the execution of the code below.

Markdown CELL1

Python CELL1

```
#heroes = ['Batman', 'Superman', 'Spiderman']
print(heroes)
print(heroes.index('Batman'))
print(heroes[0])
heroes.append('Wonderwoman')
heroes.remove('Batman')
#print(heroes[2])
print(heroes.index('Superman'))
print(heroes)
```

Python CELL2

```
#heroes = ['Batman', 'Superman', 'Spiderman']
print('Batman' in heroes)
print('Ironman' not in heroes)
#hero = 'Superman'
print(hero in heroes)
print('Ironman' not in ['Captain America', 'Ironman', 'Hulk'])
```

Python CELL3

```
#heroes1 = ['Batman', 'Superman', 'Spiderman']
#heroes2 = ['Captain America', 'Ironman', 'Hulk']
print(heroes1 + heroes2)
heroes = heroes1 + heroes2
```

```
heroes2.remove('Hulk')
print(heroes)
```

Python CELL4

```
#heroes = ['Batman', 'Superman', 'spiderman', 'Captain America', 'Ironman', 'Hulk']
heroes.sort()
#heroes.reverse() #Try this also
print(heroes)
```

Python CELL5

```
#heroes = ['Batman', 'Superman', 'spiderman', 'Captain America', 'Ironman', 'Hulk']
print(sorted(heroes))
print(list(reversed(heroes)))
print(heroes)
```

Python CELL6

```
#heroes = ['Batman', 'Superman', 'spiderman', 'Captain America', 'Ironman', 'Hulk']
for hero in heroes:
    #print(f"my hero is {hero}") #Try this also
    print("my hero is {}".format(hero))
```

Python CELL7

```
#numbers = [1, 2, 3, 4, 5, 6]
total = 0
for number in numbers:
    total = total + number
print(total)
```

Python CELL7b

```
numbers = [1, 2, 3, 4, 5, 6]
#total = sum(numbers)
print(total)
```

Python CELL8

```
age = input("Type your age: ")
age = int(age)
if age >= 100:
    print("That is not a valid age")
elif age >= 18:
    print("You are old enough to drive")
elif age <= 0:
    print("That is not a valid age")
else:
    print("You are not old enough to drive")
```

Python CELL8b

```
age = input("Type your age: ")
age = int(age)
if age >= 100 or age <= 0:
    print("That is not a valid age")
elif age >= 18:
    print("You are old enough to drive")
else:
    print("You are not old enough to drive")
```

Python CELL9

```
numbers = [200, 100, 43, 10, -10, 0]
for number in numbers:
    if number > 100:
        print(f"{number} is greater than 100")
    #elif number < 100:
        #print(f"{number} is less than 100")
```

Python CELL10

```
# make a program that filters out the number that are less than 30
numbers = [200, 100, 43, 10, -10, 0]
filtered = []

for number in numbers:
    if number > 30:
        filtered.append(number)

print(filtered)

# 200, 100, 43
# ambigious instruction
```