Programming

Lesson8 – Functions
الدرس 8 - المَهِام

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Reminder – Lesson7

▶ Loops

▶ For loop
```
for x in [1, 2, 3, 4]:
    print(x)
```

▶ While loop
```
while x>10:
    print(x)
    x = x + 1
```

Functions

- Wrapper of block of code runs only when it is called
- Can take inputs (parameters)
- Can return data (results)

Function creation

▶ Using **def** keyword

▶ def my_function():
    …
    code
    …

▶ Example:
def print_me():
    print('Hello word, my name is Saeed')

Function call

- Example:
```
def print_me():
    print('Hello word, my name is Saeed')


print_me()
```

Arguments

▶ def my_print(msg):
     print('***my print****', msg)

▶ msg is a parameter that my_print function is expecting

Function call:

   my_print('Hello world')

will print

   my print* Hello world

▶ Multiple arguments:
   def my_print(first_name, last_name):
       print('First name:', first_name, ', Last name:', last_name)

my_print('Saeed', 'Isa') ➜ First name: Saeed , Last name: Isa

Result

▶ Result is function return value

```
def my_sum(x, y):
    res = x + y
    return res



val = my_sum(1, 9)

print(val) ➜ will print 10
```

Let's try...☺

- Open PyCharm:
  - Create new file: functions.py
  - Start coding ☺

Thank you ☺!

Stay tuned for more!