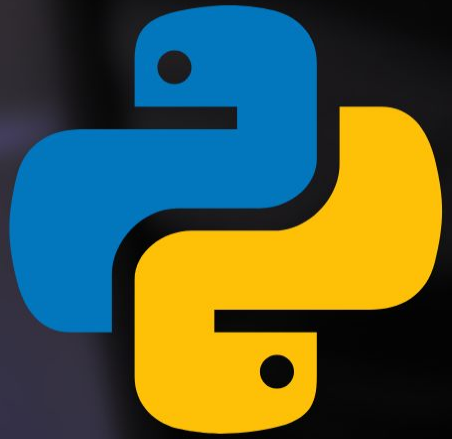
Day 4

Presented on June 23, 2021

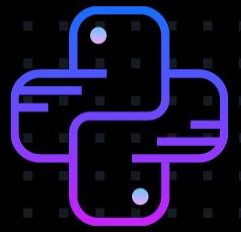
Akif Islam

BEGINNER'S COURSE ON

PYTHON



VIRTUAL SESSION (JUNE 20- JUNE 24)



Quick Recap

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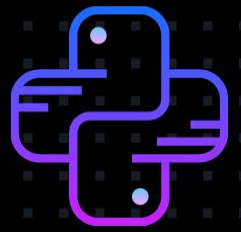
import math



```
math.ceil(2.5)    # 3
math.floor(7.9)  # 7
math.gcd(12,16) # 4
math.factorial(5) # 120
round(4.45) # 4
round (4.9) # 5
```

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How values are assigned?

C = 15

A = 10

B = A + 10

A = B + 20

C = A + B + C + 5

Now, A = ? , B = ?, C = ?

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How values are assigned?

```
C = 15
A = 10
B = A + 10   # B : 20
A = B + 20   # A : 40
C = A + B + C + 5  # C: 80
```

Now, A = 40 , B = 20, C = 80

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If-Else

```
A = 75

if ( A>50) :
    print("Greater than 50")
else :
    print("Less than 50")
```

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If-Else

```
Name = input("What's your name?")

if ( Name == "Rahim") :
    print("Abul")
elif (Name == "Karim") :
    print("Kabul")
else :
    print("I don't know you ")
```

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If-Else

```
Password = input(“Enter Password \n”)
Length_of_password = len( Password)

if( Length_of_password < 3 ) :
    print(‘Your Password is too short  ’)

else if (Length_of_password > 20):
    print(‘Your password is too long’)
else :
    print(“Okay !”)
```

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If-Else

```
amount = input("Enter amount to convert : ")  #100$

if amount.endswith("$"):
    value = amount.replace("$","")
    value = int(value)
    print(f"{value*80} TK")

else:
    value = amount.replace("TK","")
    value = int(value.strip())
    print(f"{value/80} $")
```

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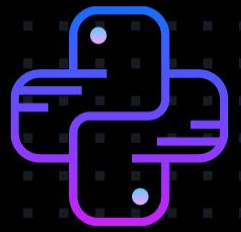

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strip ( )

strip() is an inbuilt function in Python programming language that returns a copy of the string with both leading and trailing characters removed (based on the string argument passed).

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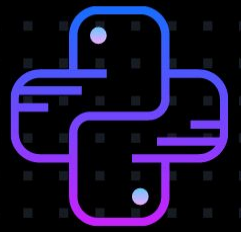

How to print all numbers from

1 to 10?

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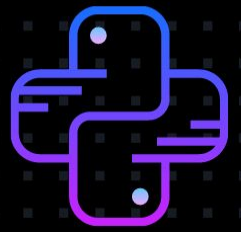

How to print all numbers from

1 to 100?

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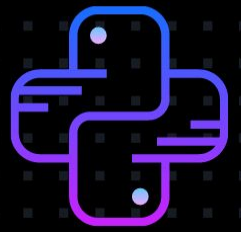

How to print ‘Hello World’

100 times?

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While Loop

```
while ( condition is True ) :
    #Run these commands
    #.....
    #.....
```

While Loop

```
i = 0
while ( i < 5 ) :
    i= i + 1
    print('Hi')
```

Note: remember to increment i, or else the loop will continue forever.

#Output

Hi (i = 0)
Hi (i = 1)
Hi (i = 2)
Hi (i = 3)
Hi (i = 4)

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How to print all **odd** numbers?

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How to print all **even** numbers?

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break and **continue**

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break & continue

```
while i < 5 :
    print(i)
    break
```

```
while i < 5:
    If (i == 2)
        continue
    print(i)
```

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import random

The random module is a built-in module to generate the pseudo-random variables. It can be used perform some action randomly such as to get a random number, selecting a random elements from a list, shuffle elements randomly, etc.

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$$x = x + 10$$

$$x \mathrel{+}= 10$$

(Both are same)

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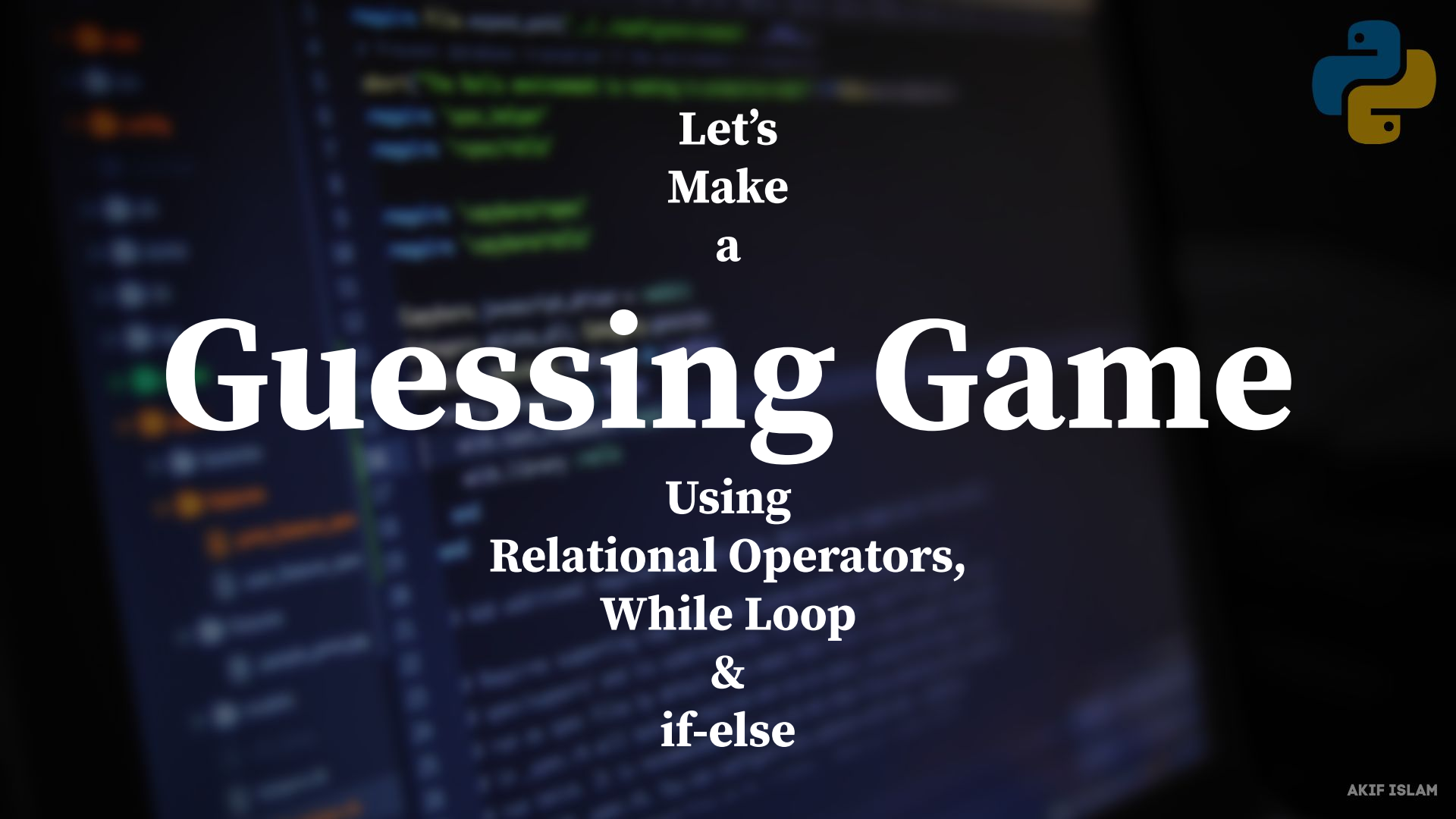
Let's
Make
a
Guessing Game
Using
Relational Operators,
While Loop
&
if-else
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For Loops in Python

A for loop is used for iterating over a sequence

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```
words = “banana”

for i in words :
    print(i, end =“ ”)
```

Output : b a n a n a

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```
for i in range (6):
    print(i)
```

Output : 0 1 2 3 4 5

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```
for x in range(2, 6):
    print(x)
```

Output : 2 3 4 5

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```
for x in range(1,10,2):
    print(x)
```

Output : 1 3 5 7 9

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```
for x in range(10,1,-2):
    print(x)
```

Output : 10 8 6 4 2

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Nested For Loop

```
for i in range(1, 5):
    for j in range (10,15):
        print(j)
```

- range(5): generates 0,1,2,3,4
- range(1,5):generates 1,2,3,4
- range(1,5,2): generates 1,3

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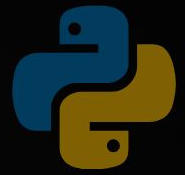
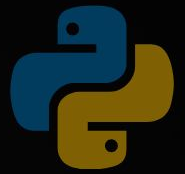
Class Task

What will be the output of this program?

```
for i in range(1,5, 1):
    for j in range (1,5,1):
        print(j)
```



Class Task



Correct Answer :

1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4

How can we write our own reusable function?

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Functions / Methods

```
def  sum ( a , b ) :
    print(a + b )
```

```
def my_function(country = "Norway"):
    print("I am from " + country)
```

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