

```

# Loop, while loop

i = 1
while i < 10:
    print(i)
    i = i + 1

    1
    2
    3
    4
    5
    6
    7
    8
    9

# break keyword
i = 1
while i < 8:
    print(i)
    if i == 3:
        break
    i = i + 1

    1
    2
    3

#Rock paper & scissors, uC = userchoice ,, cC = computer choice
#cS = computer selection of RPS
import random
print("Welcome to the game")
uC = input("Enter either rock , paper or scissors")
cC = ("rock" , "paper" , "scissors" )
cS = random.choice(cC)
print(f"\n user choice is{uC} and computer choice is {cS} \n")

# Parctice for loop
# ask user a number like 1256
# calculate sum of digit --- > 1+2+5+6

# solution

total = 0
num = input("enter a number : ")
for i in range(0, len(num)):
    total += int(num[i])

print(total)

    enter a number : 1111
    4

# practice for loop
# ask user name and count each character
# "Akshay Verma"

name = input("enter your name : ")
temp = ""
for i in range(0, len(name)):
    if name[i] not in temp:
        print(f"{name[i]}: {name.count(name[i])}")
        temp += name[i]

    enter your name : Akshay Verma
    A: 1
    k: 1
    s: 1
    h: 1
    a: 2
    y: 1
    : 1

```

```
V: 1
e: 1
r: 1
m: 1
```

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# break and continue keyword in python
# (it is used to break the keyword)
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```
# 1 to 10 print
for i in range(1, 11):
    if i == 5:
        break
    print(i)
```

```
# continue
#print 1 to 10 , but not 5
# 1, 2, 3, 4, 6, 7,8,9,10
for i in range(1,11):
    if i == 5:
        continue
    print(i)
```

```
1
2
3
4
1
2
3
4
6
7
8
9
10
```

```
# modify number guessing game
#guess a number between 1 to 100 : 50
```

```
winning_number = 43
guess = 1
number = int(input("guess a number between 1 and 100 : "))
game_over = False

while not game_over:
    if number == winning_number:
        print(f"you win, and you guessed this number in {guess} times ")
        game_over = True
    else:
        if number < winning_number:
            print("too low")
            guess += 1
            number = int(input("guess again : "))
        else:
            print("too high")
            guess += 1
            number = int(input("guess again : "))
```

```
too high
too high
too high
too high
```