## $23rd\_september\_python\_whileloop\_break$

## February 10, 2024

```
[]: #while True:
       # print("this is my first while loop")
[1]: a=10
     while a>=1:
         print(a)
         a=a-1
    10
    9
    8
    7
    6
    5
    4
    3
    2
    1
[4]: s=0
     n=1
     t=5
     while n <= t :
         s=s+n
         n=n+1
     print(s)
    15
[5]: s=1
     n=1
     t=5
     while n <= t :
         s=s*n
         n=n+1
     print(s)
```

```
[6]: n=int(input("enter a number for which you are looking for table"))
     i=1
     while i \le 10:
         product=n * i
         print(n,'*',i,'=',product)
         i=i+1
    enter a number for which you are looking for table 12
    12 * 1 = 12
    12 * 2 = 24
    12 * 3 = 36
    12 * 4 = 48
    12 * 5 = 60
    12 * 6 = 72
    12 * 7 = 84
    12 * 8 = 96
    12 * 9 = 108
    12 * 10 = 120
[7]: import time
     s=5
     while s>0:
         print(s)
         time.sleep(1)
         s=s-1
     print("break time is over")
    5
    4
    3
    2
    break time is over
[1]: #vending machine
[2]: money_in_hand=20
     while money_in_hand >= 5:
         print(money_in_hand)
         choice=int(input("enter your choice(1.biscuit, 2.chips, 3.redbull, 4.cok)"))
         if choice ==1:
             print("take your biscuit")
             money_in_hand=money_in_hand-4
         elif choice ==2:
             print("take your chips")
             {\tt money\_in\_hand=money\_in\_hand-5}
         elif choice ==3:
```

```
print("take your redbull")
             money_in_hand=money_in_hand-10
         elif choice ==4:
             print("take your coke")
             money_in_hand=money_in_hand-8
         else:
             print("you have not entered the correct choice")
    print("you dont have enough balance in your vallet")
    20
    enter your choice(1.biscuit, 2.chips, 3.redbull, 4.cok) 4
    take your coke
    12
    enter your choice(1.biscuit, 2.chips, 3.redbull, 4.cok) 2
    take your chips
    enter your choice(1.biscuit, 2.chips, 3.redbull, 4.cok) 1
    take your biscuit
    you dont have enough balance in your vallet
[2]: import time
     s=5
     while s > 0:
         print(s)
         time.sleep(1)
         s=s-1
     print("break time is over")
    5
    4
    3
    2
    break time is over
[]: import time
     stop=False
     while not stop:
         print("enter s to stop the timer")
         time.sleep(1)
         press_stop= input("enter s for stop")
         if press_stop.lower() =='s':
             stop=True
             print("start the class break is over")
```

```
enter s to stop the timer
    enter s for stop 6
    enter s to stop the timer
[1]: user_id="shamnu"
    password="shamnu@123"
    counter=1
    user id check=False
    userid=input("enter your user id for account")
    while counter <=3:
         if userid==user_id:
            user_id_check=True
         else:
            print("your user id is incorrect try again")
            break
         if user id check==True:
            pswd=input("enter your password for respective user id")
             if pswd==password:
                 print("you have logged in successfully")
                 break
            counter=counter+1
    if counter>3:
        print("you have attempted maximum times and your account is locked")
    enter your user id for account shamnu
    enter your password for respective user id shamnu@123
    you have logged in successfully
[2]: todo_list=[]
    end_of_todo='n'
    while end_of_todo!='y':
        todo_item =input("enter your todo task")
        todo_list.append(todo_item)
        end_of_todo = input("enter n id you want to add in todolist or enter y ifu
      print("my todo list is",todo_list)
    enter your todo task reading
    enter n id you want to add in todolist or enter y if you dont wantto add n
    enter your todo task drawing
    enter n id you want to add in todolist or enter y if you dont wantto add flying
    enter your todo task flying
    enter n id you want to add in todolist or enter y if you dont wantto add y
    my todo list is ['reading', 'drawing', 'flying']
```

# reccursive call

```
[1]: def fact(n):
         if n==0:
             return 1
         else :
             return n*fact(n-1)
[2]: fact(5)
[2]: 120
[3]: def fib(n):
         if n<=1:
             return n
         else :
             return fib(n-2)+fib(n-1)
[4]: fib(5)
[4]: 5
[1]: 123121
[1]: 123121
[3]: def sum_of_digit(n):
         sum=0
         while n!=0:
             d=n\%10
             sum=sum+d
             n=n//10
         return sum
     sum_of_digit(123)
[3]: 6
[4]: def get_Sum(n):
         sum=0
         for digit in str(n):
             sum += int(digit)
         return sum
[5]: get_Sum(234)
[5]: 9
```

```
[6]: 123//10
 [6]: 12
 [7]: 123/10
 [7]: 12.3
 [8]: def sum_digit(n):
          if n<=9:
              return n
          else :
              return n \% 10 + sum_digit(n//10)
 [9]: sum_digit(345)
 [9]: 12
[10]: 1 = [3,4,5,6,76]
[11]: max(1)
[11]: 76
[13]: def max_find(1):
          if len(1) == 1:
              return 1[0]
          else :
              return max(1[0],max_find(1[1:]))
[15]: \max_{\text{find}([4,5,8,6,6,7,3,4,5,6,90])}
[15]: 90
[16]: 5**2
[16]: 25
[17]: 5**5
[17]: 3125
[18]: pow(5,5)
[18]: 3125
```

```
[22]: def power_fun(n,k):
    if k == 0:
        return 1
    else:
        return n * power_fun(n ,k-1)
[23]: power_fun(2,4)
[23]: 16
[]:
```