## python by zen

#### In [1]:

#### import this

The Zen of Python, by Tim Peters

Beautiful is better than ugly. Explicit is better than implicit. Simple is better than complex. Complex is better than complicated. Flat is better than nested. Sparse is better than dense. Readability counts. Special cases aren't special enough to break the rules. Although practicality beats purity. Errors should never pass silently. Unless explicitly silenced. In the face of ambiguity, refuse the temptation to guess. There should be one-- and preferably only one --obvious way to do it. Although that way may not be obvious at first unless you're Dutch. Now is better than never. Although never is often better than \*right\* now. If the implementation is hard to explain, it's a bad idea. If the implementation is easy to explain, it may be a good idea. Namespaces are one honking great idea -- let's do more of those!

## operation, operator and oprand

```
In [*]:
5 + 7 #operation
# + operator
# 5,7 oprand
#PEMDAS
print(8*7+3/2-4) #output
#56+3/2-4
#56+1.5-4
#57.5-4
#53.5
```

## how python will store his data

```
In [4]:

a = 8
b = 8
print(a)
print(b)

8
8
In [5]:

print(id(a))
print(id(b))
```

140714910327408 140714910327408

## how to find the type of data.....by function type

```
In [2]:
    a = 8
    type(a)
Out[2]:
    int

In [3]:
    a = 'hamza'
    type(a)
Out[3]:
str
```

## difference between list and tuple.....only barcket difference

```
In [6]:
```

```
#index 0 1 2 3 4
names =("hamza","ali",20,True,False)
#index -5 -4 -3 -2 -1
type(names) #bracket difference
```

#### Out[6]:

tuple

#### In [7]:

```
#index 0 1 2 3 4
names =["hamza","ali",20,True,False]
#index -5 -4 -3 -2 -1
type(names) #bracket difference
```

#### Out[7]:

list

```
In [8]:
print(names)
print(names[1])
['hamza', 'ali', 20, True, False]
ali
In [9]:
names = ("hamza", "google", "hamza")
print(names)
type(names)
('hamza', 'google', 'hamza')
Out[9]:
tuple
```

```
In [10]:

names = {"hamza", "google", "hamza"}
print(names)
print(type(names))
names = list(names)
print(names[1])
type(names)

{'hamza', 'google'}
<class 'set'>
google
Out[10]:
list
```

# PERFORMING SLICING BY 'dir function'.....important part of microsoft test

```
In [ ]:

dir(name) #ek function jo kise chez ka tamam attributes apko dee daaa ga function=
```

```
In [11]:
```

```
name1 ="muhamMad qAsIm"
print(name1.lower())  #inline perform hoo raha ha function

muhammad qasim
muhamMad qAsIm

In [12]:

name1 = " MUHAmmad QasIm "
print(len(name1))
print(name1.strip())
print(len(name1.strip()))
```

24 MUHAmmad QasIm 14

```
In [13]:
```

```
a = "we are pakistan we love our country"
a.find("pakistan")
a[a.find("we"):5]  #we se aga 5 words count kroo
b = a.split()
b  #phr hum es se aur function krwa skta hain
```

#### Out[13]:

```
['we', 'are', 'pakistan', 'we', 'love', 'our', 'country']
```

#### COCATENATION

#### **by SIMPLE METHOD**

```
In [*]:
```

```
name = ["hamza"]
fname = ["muhammad"]
programe = "paic"
print("Student Name : name \nFather Name : fname \nPrograme: programe \n (name,fname,programe)
```

#### BY PLUS METHOD

```
In [25]:

namez = "hamza"
fnamez = "konain"
programz = "piaic"

#+
print("student name : " + namez + "\n father name : " + fnamez + "\n programe : " + program

student name : hamza
father name : konain
programe : piaic
```

#### BY PERCENTAGE METHOD (IMPORTANT)

```
In [*]:
```

```
name = input("enter name")  #ENTER NAME WHEN EXECUTE THE CELL
fname = input("enter fname")  #ENTER FATHER NAME WHEN EXECUTE THE CELL
programe = "paic"
city = input("enter city name")#ENTER CITY NAME WHEN EXECUTE THE CELL
address = input("enter address")#ENTER ADDRESS EHRN EXECUTE THE CELL
country = "pakistan"
score = 30  #SUGEST ME HOW I CAN USE INPUT FUNCTION BY DEFINING NUM AND INTEGER...
print(" 1)Student Name: %s \n 2)Father Name: %s \n 3)Programe: %s \n 4)City: %s \n 5)Addres
7)score: %d"%(name,fname,programe,city,address,country,score))
```

enter name

In [ ]: