

Hi guys, this is Akshansh (+91, 8384891269, akshnanshofficial@gmail.com (<mailto:akshnanshofficial@gmail.com>)). I've already shared functions in python lecture. You would notice that, those lecture wasn't in a way we used to discuss. Typically text book kind of language was used, aha? Yeaah? That's why I am sharing or reiterating those concept again. This is one of the most important logic and this needs you fucking attention too. SO let's get started.

Let's take a realistic example (I know you are in love with these words he he he). Suppose, Alex has 4 girlfriends (are you jealous? ahan, don't be jealous. Those 4 will dump him at the end of the lecture and I'll make sure he he he).

It is already night and Alex is going to sleep. As he is a good boyfriend he has to wish them good night. I am writing a script for him so that he can say good night.

In [33]:

```
1 #to Scarlet
2 print("""Baby, I am going to sleep.
3 You should sleep too.
4 Good night myLove and
5 I love you from the bottom of my heart.
6 Good night Scarlet""")
```

```
Baby, I am going to sleep.
You should sleep too.
Good night myLove and
I love you from the bottom of my heart.
Good night Scarlet
```

In [34]:

```
1 #to Alina
2 print("""Baby, I am going to sleep.
3 You should sleep too.
4 Good night myLove and
5 I love you from the bottom of my heart.
6 Good night Alina""")
```

```
Baby, I am going to sleep.
You should sleep too.
Good night myLove and
I love you from the bottom of my heart.
Good night Scarlet
```

In [35]:

```
1 #to Tacy
2 print("""Baby, I am going to sleep.
3 You should sleep too.
4 Good night myLove and
5 I love you from the bottom of my heart.
6 Good night Tacy""")
```

```
Baby, I am going to sleep.
You should sleep too.
Good night myLove and
I love you from the bottom of my heart.
Good night Tacy
```

In [36]:

```
1 #to Nisha
2 print("""Baby, I am going to sleep.
3 You should sleep too.
4 Good night myLove and
5 I love you from the bottom of my heart.
6 Good night Nisha""")
```

```
Baby, I am going to sleep.
You should sleep too.
Good night myLove and
I love you from the bottom of my heart.
Good night Nisha
```

Alex is pro when it comes to sexting (texting I mean). But each time he has to type that long msg to every one.

In real life he just copy paste it. This makes things easy for him. But think about the source code, if he would be programmer, what would he do? Writing again and again. (noh noh noh) He will get mad by typing that again and again.

So we introduced, functions for this. So that he doesn't need to write again and again.

That is what function does, it reduces the work (that doesn't mean that you too can have 4 gf, for that lot of money or good look required :-P). If there is something that gets repeated again and again, function make it go easy.

You don't need to type it again and again, just use function and get it done.

how you create a function?

first you have to define a function. How you define function? We use "def" for that and then we write function name and then use (). Note that : is a must at the end of this. This is called function definition.

```
def function_name():
```

once function definition is done like above, you can write your code. Code or statements should be properly indented. Statements is called body of the function.

In [5]:

```
1 def function_name():
2     print("statements goes here")
3     print("you can use as many as statements")
```

once definition and statement body is written, function has completed. Note that function will not run itself(it is function not your girlfriend :-P). You have to call it.

so how the function runs?

darling, you have to call the function for that. You can call the function by function_name()

In [6]:

```
1 function_name()
```

```
statements goes here
you can use as many as statements
```

note that parenthesis are empty. That means function doesn't take input. You can give function inputs too. These inputs are called arguments or parameters.

Let's write a code of function so that we can help Alex to wish good night to his 4 girlfriends.

In [37]:

```
1 def wishing_night(girl):
2     print("""Baby, I am going to sleep.
3     You should sleep too.
4     Good night myLove and
5     I love you from the bottom of my heart.
6     Good night""", girl)
```

You see, within parenthesis I wrote girl. That's input or argument or parameter. Whatever the fuck you want to call it. Now Alex doesn't need to write same code lines for each girl. He just needs to call function for each of his gfs.

In [38]:

```
1 #calling for "Scarlet"
2 wishing_night("Scarlet")
```

```
Baby, I am going to sleep.
You should sleep too.
Good night myLove and
I love you from the bottom of my heart.
Good night Scarlet
```

In [39]:

```
1 #calling for "Alina"  
2 wishing_night("Alina")
```

Baby, I am going to sleep.
You should sleep too.
Good night myLove and
I love you from the bottom of my heart.
Good night Alina

In [40]:

```
1 #calling for "Tacy"  
2 wishing_night("Tacy")
```

Baby, I am going to sleep.
You should sleep too.
Good night myLove and
I love you from the bottom of my heart.
Good night Tacy

In [41]:

```
1 #calling for "Nisha"  
2 wishing_night("Nisha")
```

Baby, I am going to sleep.
You should sleep too.
Good night myLove and
I love you from the bottom of my heart.
Good night Nisha

See how arguments are passed into function and how function makes it easier to do the task. When there is something that needs to be repeated in your code, next time make a function for that.

Taking another realistic example to understand how arguments work. Suppose you get a gf (ahan, don't run in happiness, just stay here you need to code and understand how input works).

you want to wish good night to your girl named "Riya". But in over excitement you sent your wishes to two girls(ssssshhhhhh) what will happen? You will get caught and your girl will come to know that same msg was sent to another girl. Game over your life is full of error.

In [18]:

```
1 wishing_night("Riya", "Riyaa")
```

TypeError

Traceback (most recent call

last)

<ipython-input-18-810d729d0be0> in <module>

----> 1 wishing_night("Riya", "Riyaa")

TypeError: wishing_night() takes 1 positional argument but 2 were given

See you tried to sent same msg to two girls but this didn't work for you. Because if you look at the definition of the function, you'll come to see that it was basically designed to have just one input and you gave 2 input. You get an error for that and you lost your gf too man. Go get corona virus for yourself :-P

understanding the default parameter

Suppose when a girl msg you at fb, by default you day, hellow dear how're you. and suddenly your ex msg you there. Will the answer remain same? A big no, right? Let's create a default msg to each girl that msg you at fb.

In [19]:

```
1 def message(msg="hellow dear, how're you?"):
2     print(msg)
```

In [21]:

```
1 #suppose someone msg you by default
2 #it will run as following
3 message()
```

hellow dear, how're you?

In [22]:

```
1 #now you ex msg you
2 message("fuck, not you")
```

fuck, not you

observe and look, i changed the input you should do the same when you don't want default input. How you make something as default input? by assining it with = as i did in In[19]

can you pass a list/tuple/dict to function?

yes, indeed you can. Make sure that you first define the function and then pass something into it. There must be something to take input. Like if there is no girlfriend, there will be no love making (don't look at your right hand, that's definitely not love making :-p)

In [23]:

```
1 def passing_list(lst):
2     for element in lst:
3         print(element)
4
5 gf = ["Riya", "Riya's sister", "Riya's Bestfriend"]
```

```
1 first I created a function that will take list as argument. Then i ran for
loop to get each element of the list. Out of the function I created, list of
gf you have-
```

In [24]:

```
1 passing_list(gf)
```

```
Riya
Riya's sister
Riya's Bestfriend
```

understanding return

return is kind of function that return something once executed. It doesn't matter what you pass in as arguments, it is always going to return what is expected. Like you girl's mood in those days. You know whatever you do, response will be same

In [28]:

```
1 def return_fnc(girl):
2     return 5+8
```

In [29]:

```
1 return_fnc("riya")
```

Out[29]:

```
13
```

In [30]:

```
1 return_fnc("what the fuck")
```

Out[30]:

```
13
```

Understanding pass

sometime you have to create function but you don't need something from it. Like your parents, they don't have expectations from you and don't want anything in return.

In [31]:

```
1 def understanding_pass(girl):  
2     pass
```

In [32]:

```
1 understanding_pass("Riya")
```

see there is no result, function has passed without doing anythin.

```
1 Thanks for your time. My time is up now. This was Akshansh from India. Stay  
safe and stay away from Covid 19. Keep pythoning.
```