⌄ OOPs

Object Oriened Progaming OOPs is used in java specially.. but in other language OOps is not is use. whereas C language does not support OOPs, but C++ support OOPs.

```python
name="Aayush Gupta"
#String Formatting -> Filling some variables inside string data
print("Hello world{}")
print("Python is an awesome language to learn")
print("But you shold explore other language its alwatys good to be versitile")
```

```python
#String Formatting -> Filling some variable inside string data
x=int(input("X:"))
y=int(input("Y:"))
r=x+y
# need to put " f " to initate String Formatting
result=f"""
  x={x}
  y={y}
  {x} + {y}= {r}
"""
print(result);
```

```
X:5
Y:25


    x=5
    y=25
    5 + 25= 30
```

⌄ Function

a resuable piece of code arguments of parameters

```python
def hello(name):
  print(f"Hello {name}")
  print("Python is an awesome language")
  print("But you shold explore other language it's always good to be versitile")
```

```python
hello("Aayush Gupta")
```

```
Hello Aayush Gupta
Python is an awesome language
But you shold explore other language it's always good to be versitile
```

```python
hello ("Smruti Prangya")
```

```
Hello Smruti Prangya
Python is an awesome language
But you shold explore other language it's always good to be versitile
```

```python
name=["Aayush","Abhishek","Smruti","Sneha"]
#index  0        1         2         3
msg="Hello {}, I hope you are enjoying the session."
print(msg.format("Aayush"))  #formating the seting
print(name[0])
print(name[2])
```

```
Hello Aayush, I hope you are enjoying the session.
Aayush
Smruti
```

```python
# another Example
s="Hello my name is {} and i live in {} city."
name="Aayush"
city="Bhubneshawar"
print(s.format(name, city))
```

```
Hello my name is Aayush and i live in Bhubneshawar city.
```

```
i=0; # initialization
while i<=4: # condition
  print(msg.format(name[i]))
  i=i+1 # change in state
```

```
Hello A, I hope you are enjoying the session.
Hello a, I hope you are enjoying the session.
Hello y, I hope you are enjoying the session.
Hello u, I hope you are enjoying the session.
Hello s, I hope you are enjoying the session.
```

student --> Real world Entity roll number

name

class section

subject

fees

...

⌄ Why we need OOPs

It is the combination of Data + function together in a single scope

class object --> object function --> method

"class" collection of objects and method

" Object " A real world entity set of features / Attribute to define a real world entity in computer

"method " Object specific function to process object data

```
class human:
  def __add__(h1,h2):
    return f"{h1.name} and {h2.name} are bhai bhai ...!!!"
h1=human()
h1.name="Aayush"
h2=human()
h2.name="Smruti"
print(h1+h2)
```

```
Aayush and Smruti are bhai bhai
```