```python
#Computer Programming : is the process of creating a set of  instructions  that tell computers how
or what task computer need to do.
Programming can be done with the help of different type of programming languages:
    c,c++ , python , java, javscript,php
```

```python
#Types of Programming languages we are having:
1.Static Programming Languages --> we need  to define the datatype while declaring any data
Static Programming --> we need to give the Datatype first after that we can use the data.
Example of Static languages --> c,c++ and java
2.Dynamic Programming Languages --> we need not to give the datatype at the runtime compiler/Interpr
etor will automatically recognize the data
Example --> Python
```

```python
#What is Python Programming?
Python is a general purpose high level programming language.

General Purpose --> Common purpose(That means we can use this programming language anywhere)
High level programming language --> we need not to take care low level things( address of varibale ,
pointers,Memory utilization , Datatype)
such type of programming language are known as programmer friendly programing language.
```

```python
#History of Python
Python is developed by guido Van rossum in 1989 at working on National Reseach Institute at netharland
But Official Date of Birth of Python is 20th feb 1991.
Python is implemented before java.(1996 jdk 1.0).
```

```python
#Where we can use python:
1.Machine learning Algorithms--> scikit learn
2.Web Applications --> Django , Flask , tornado etc
3.Data science and Data Analysis --> Numpy , scipy, Pandas
4.Data visualization --> Matplotlib, Seaborn etc..
5.Iot --> Internet of Things --> AI --> Python
6.Game --> Pygame
7.Desktop Application--> Tkinter
```

```python
#Worst case of using Python:
1.Mobile Application --> Java and Kotlin
2.For implementing compiler --> High level programming and it is slow as compared to java
```

```python
#Features of Python
1.Simple And Easy : Its syntax is similar to our english language
2.Free and Opensouce
3.High level Programming --> Programmer friendly(need not to take care low level things)
4.Platform indepedent --> If you are writting python code in one operating system(Widnows, linux,
mac etc) then that code will also worked  on any operating system
5.Dyanmic Programming Language --> we need not to define the any datatype.
6.Both Functional and Object oriented
7.Interpreted Programming langauge --> Line by line execution

Compiled Programming language -->  Exection will done atonce.(whole file will be executed atonce)
interpreted Programming Languages -->Exection will be done line by line
```

```python
i=0
print(i)
print("hello")
print("world")
```

```python
def sum(a,b):
    return a+b
class sum:
    def sums(a,b):
        return a+b
```

```python
#IN C++
#header file
int main()
{
    cout<<"Hello world";
}
```

```python
#In JAVA
class test{
    public static void main("String[] args"){
        sop("hello world");
    }
}
```

```python
#In Python
print("Hello world")
```

```python
Note:if  number of lines of code is increased then the chances of getting error(making mistake)
is higher
```

```python
#Python Installation
Python installation of laptop whose ram is less than 4gb. --> Python(IDE) and VS Code
```

```python
print("Hello world")
print("hello world")
```

```python
print("Hello world")
print("hello world")
```