1) What are the Pros & Cons of Python?.

2) History of Python?.

1A) Pros & Cons in Python?

* Pros :- of Python :-

1) Easy to learn & use :-

* Python has a Simple, english like. Syntax & that's easy to read & write a Program.

* Great for beginners & Quickly learn / development.

2) Extensive libraries & frame work:

* Huge Standard library & third-party modules for almost every-thing.

* web development ; Django flask, fast API

3) Cross - Platform & Portable :-

* Python works on 'windows' macos, linux, & even Raspberry Pi.

* Code can usually run anywhere without Modifications.

4) Strong Community Support:

* One of the largest Programming communities in the world.

* Tons of documentation, tutorials & open - Source tools available.

5) Versatile and Multi - Purpose:

* uses in many fields

* web development

* Artificial Intelligence & ML

* Cons :- of Python :-

1) Slower Execution Speed :-

* Python is interpreted not compiled - it executes the codes line by line.

* Slower than language like "C, C++ or java.....

2) High memory Usage :

* Python uses more memory due to its dynamic typing & garbage collection

* Not ideal for memory - constrained devices.

3) Not Great for Mobile Development :

* Very few mobiles apps are written in Python.

* frame works. like "kivy" & BeeWare. but aren't as mature as native tools.

4) Run-time Errors :- (Dynamic Typing):-

* Python is dynamically typed meaning variable type are checked at run time

* it is flexibility can cause of unexpected bugs that can't caught until the program runs.

5) Global Interpreter lock (GIL)

* The (GIL) Prevents multiple threads from running Python code at once in the same process.

* This limits Performance in multi - threaded, CPU - bound task

2) History of Python?

Ans: Python is a high-level general-purpose programming language created by "Guido Van Rossum" in the laste 1980's. Guido workes at the Centrum Wiskunde & informatica (CWI) in the Netherlands, where he was using a programming language in called "ABC". ABC was simple & easy to use. but it lacked flexibility for certain types of systems programming, particulary integration with the Amoeba distributes integration operating system that Guido was developing During Christmas in 1989.

These new language would be open-source highly exceptions & dynamic typing easily. The name of "python" did not come from the snake – Guido names it after his favorite British comedy show monty python's flying circus. He wanted a short fun & unique name for his new language.

The first official version in python 1.0 was releases in february 1991. it introduces many of the coures futures that still define python today – Such as functions, modules, exceptions & core datatypes like lists & dictionaries. One of the reason python becomes a popular quickly was its simple the reusable syntax. that looks like a natural English.

in short python history reflects a journey of continuy collaboration to simpliicy & clarity. from a small hobby project in the to the backbone of modern computing, python has become a universal language that connects developers industrial making it one of the most influential language.