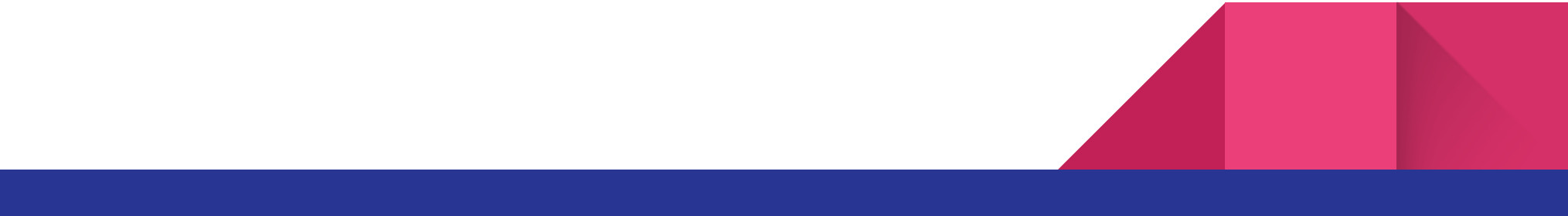
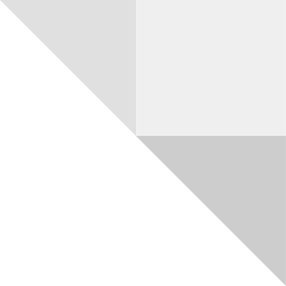
Python Programming

Advantages and disadvantages of Python

List the advantages and disadvantages of Python(any4). Write the answer in a document, save it and upload.

Solution:

Python has become a widely used language ,nowadays. Some of the advantages of Python are as follows:

1. **Ease of Use - Python has a simple, concise, and straightforward syntax. A Python program looks a lot like plain English and is highly readable. This makes Python programs easy to read and debug.**
2. **Versatility - Python is a flexible, general-purpose language that fully supports both procedural and object-oriented programming. Due to its built-in and third-party packages, it is suitable for a wide range of tasks.**
3. **No Compile Process - Python is an interpreted language and programs are automatically compiled at runtime .A program can be run as soon as it is written. There is no separate compiler, no time-consuming compilation step, and no opaque compiler errors.**
4. **Automatic Memory Allocation - Python does not have pointers and developers do not have to assign free space in memory. Python allocates memory automatically and a garbage collector recycles memory from discarded objects.**
5. **Open Source and Free to Use - All Python releases are available for free under an open-source license.**

Despite its many advantages, Python also has a few disadvantages. These are:

1. **Slow Speed - Python is much slower than more efficient languages like C and Java. As it executes the code one line at a time ,the speed of execution oftenishampered. Where speed is important for the project, Python cannot be used for coding.**
2. **Poor Memory Efficiency - To make it simple for the developer, Python needs a lot of memory space; this can be problematic if you want to develop apps where you need to optimize memory.**
3. **Not Optimized for Database Access-Python has limitations with database access. As compared to the popular technologies like JDBC and ODBC, Python's database access layer is found to be a bit under developed and primitive .However ,it cannot be applied in the enterprises that need smooth interaction of complex legacy data.**
4. **Weak in Mobile Computing - Python is used for backend programming; due to its high memory usage and slow speed, it is generally not used for frontend programming or mobile app development.**
5. **Version Incompatibility-Many of the frame works and tools only work for specific versions and cannot be used with others.**

Forexample,Python2,consideredthelegacyversion,hasseveral frameworks created especially for it; these are not compatible with Python 3, considered current and futuristic.