

s = "this is My first Python programming class and i am learning python string and its function"

1 . Try to extract data from index one to index 300 with a jump of 3

Ans: 'h r tnrrmglsnimengyosi dtfco'

s[1:300:3]

2. Try to reverse a string without using reverse function

'noitcnuf sti dna gnirts nohtyp gninrael ma i dna ssalc gnimmargorp nohtyP tsrif yM si siht'

s[::-1]

3. Try to split a string after conversion of entire string in uppercase

s.upper()

'THIS IS MY FIRST PYTHON PROGRAMMING CLASS AND I AM LEARNING PYTHON STRING AND ITS FUNCTION'

4. try to convert the whole string into lower case

s.lower()

'this is my first python programming class and i am learning python string and its function'

5 . Try to capitalize the whole string

s.capitalize()

'This is my first python programming class and i am learning python string and its function'

6 . Write a difference between isalnum() and isalpha()

isalpha(): The string should contain all alphabetic characters excluding spaces for True conditions , otherwise it will be False condition.

isalnum(): The string may contain either alphabetic characters or numeric characters excluding spaces for True conditions , otherwise it will be False condition.

7. Try to give an example of expand tab

a="thanks\tfor\tvisting"

a.expandtabs()

'thanks for visting'

8 . Give an example of strip , lstrip and rstrip

```
b=' gg hh poojitha hnthn '
```

b.strip() \_ It will remove spaces both ends of the string

```
'gg hh poojitha hnthn'
```

```
a= "    aarav    "
```

a.lstrip() \_ It will remove the left side end space of the string

```
'aarav '
```

```
b="  nag  "
```

b.rstrip() \_ It will remove the right side end space of the string

```
'  nag'
```

9. Replace a string character by another character by taking your own example

```
g="poojitha"
```

```
g.replace('o','n')
```

```
'pnnjitha'
```

10 . Try to give a definition of string center function with an example

```
g="poojitha"
```

```
g.center(20,'#')
```

```
'#####poojitha#####'
```

11 . Write your own definition of compiler and interpreter without copy paste from internet in your own language

Source Code : A high level language developed by developers and it is understandable by humans , known as source code.

Machine Code : The computer can understand the binary code 0s and 1s , known as machine code.

Interpreter : The source code is converted into machine code by an intermediate code , known as interpreter.

Interpreter takes single lines of a code and usually takes less amount of time to analyse the source code.

No object code is generated , memory efficient and takes more time for execution .

eg: The Programming languages like Javascript ,Python, Ruby use interpreters.

Def of Compiler : The source code is converted into machine code by an object code ,known as compiler.

A compiler takes a program as a whole and takes more time to analyse the source code.

Generates the object code requires more memory and takes less time for execution.

eg: The Programming languages like C ,C++, Java use compilers.

12 . Python is a interpreted of compiled language give a clear ans with your understanding

Python is an interpreted language , which means the source code of a python program is converted into an intermediate code usually called the byte code and again translated into the native or machine language and then executed by the python virtual machine.

So Python is an interpreted language.

Python is different from compiled languages like C , C++ , as Python code is not requires to be built and linked like others.

13 . Try to write a usecase of python with your understanding

Top Ten Python Applications in Real World are:

- 1.Web Development :
2. Game developmengt
3. Business development
4. AI , ML & Data science
5. Computer aided design development
6. software development
7. Audio and visual application
8. Web scrapping etc