

What is a class and what is an object? Define a class with the name Student(attributes: rollnum,name,branch,sem and methods:input\_details(), display\_details())

What is the use of the `__init__()` method?

What is the use of the `seek()` method?

What is the use of the `tell()` method?

Describe the file access modes like 'w', 'r', 'a'

Explain mutable and immutable data types with examples

What is the `pass` statement?

Why is a base condition necessary in recursion?

What is the use of try and except blocks?

What are the uses of else and finally block in exception handling?

What is the use of `open()` function?

What is the difference between while loop and for loop?

What is the difference between loop-else structure and if-else structure?

What is the significance of if-elif-else structure over if-else structure?

What is the difference between break and continue statements?

What is the significance of pass statement in functions?

What is the importance of assert statement in program?

What benefit we get if we invoke any function inside the if expression as

```
if __name__ == '__main__':
```

What is the difference between logical and relational operators. Comment on their output style.

What is the use of nonlocal and global keyword?

Output type questions on operators(all), scope, conditional statement(if) , loops and builtin math and string functions

Linear search

Bubble sort

All lab assignments