

Central university of Haryana

Department of computer science & engineering under SOET



Python lab (BT CS 521) Assignment-1

Submitted by :-

Ponnaganti pavan kumar

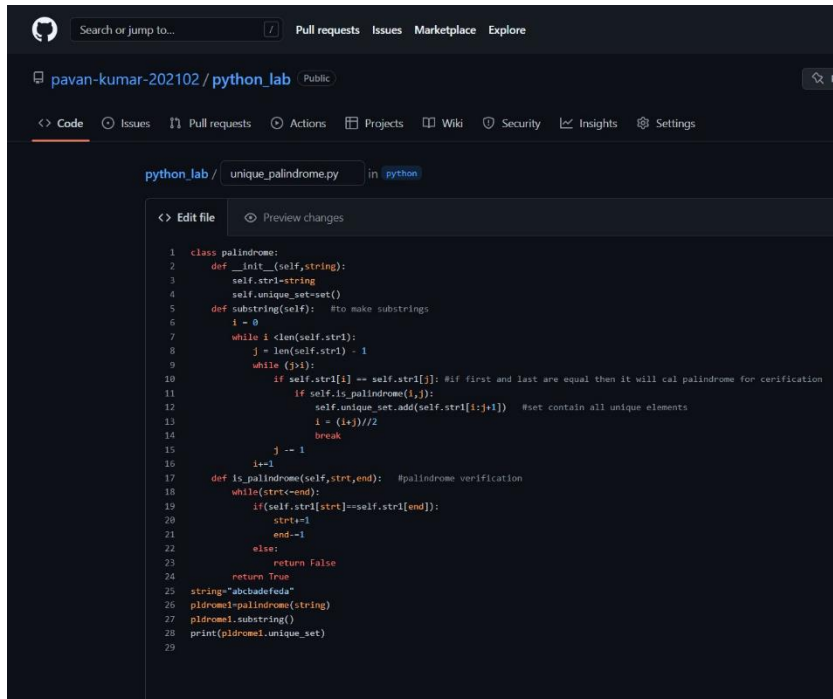
ROLL NO: 202102

submitted to :-

anant rajee bara

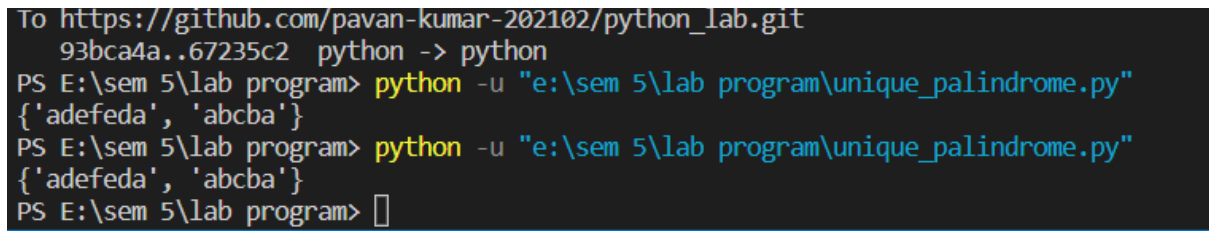
Write a function which return all the unique palindromes from a given string

Github:



```
1 class palindrome:
2     def __init__(self, string):
3         self.str1=string
4         self.unique_set=set()
5     def substring(self): #to make substrings
6         i = 0
7         while i < len(self.str1):
8             j = len(self.str1) - 1
9             while (j>i):
10                if self.str1[i] == self.str1[j]: #if first and last are equal then it will cal palindrome for cerification
11                    if self.is_palindrome(i,j):
12                        self.unique_set.add(self.str1[i:j+1]) #set contain all unique elements
13                    i = (i+j)//2
14                    break
15                j -= 1
16            i+=1
17     def is_palindrome(self, strt, end): #palindrome verification
18         while (strt<end):
19             if (self.str1[strt]==self.str1[end]):
20                 strt+=1
21                 end-=1
22             else:
23                 return False
24         return True
25 string="abcbadefeda"
26 pldromel=palindrome(string)
27 pldromel.substring()
28 print(pldromel.unique_set)
29
```

Output:



```
To https://github.com/pavan-kumar-202102/python_lab.git
93bca4a..67235c2 python -> python
PS E:\sem 5\lab program> python -u "e:\sem 5\lab program\unique_palindrome.py"
{'adefeda', 'abcba'}
PS E:\sem 5\lab program> python -u "e:\sem 5\lab program\unique_palindrome.py"
{'adefeda', 'abcba'}
PS E:\sem 5\lab program>
```

Github link:

https://github.com/pavan-kumar-202102/python_lab/blob/python/unique_palindrome.py