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ROLL NUMBER: 546

COURSE: MSc CS

SUBJECT: BIOINFORMATICS

TOPIC: MOTIF FINDING

Practical No: 6

Aim: Write a Python/Java code to find motif in a given sequence.

Code:

```python
import random

l=int(input("Enter the length of motif"))
file=open("mot.txt","r")
r=file.read()
print("Sequence",r)
size=len(r)
print("Size of the sequence",size)
pos=random.randint(0,len(r)-5)
#pos=1
print("Position",pos)
motif=r[pos:pos+l]
print("Motif",motif)
i=pos+1
while(i<=size-1):
    if(motif==r[i:i+1]):
        str1=r[i:i+1]
print("Match motif",str1)
file1=open("motoutput.txt","a")
file1.write(str1+" ")
i+=1
```

OUPUT:

```
*IDLE Shell 3.11.0*                                            —   □   ✕

File  Edit  Shell  Debug  Options  Window  Help

     Python 3.11.0 (main, Oct 24 2022, 18:26:48) [MSC v.1933 64 bit (AMD64)] on win32
     Type "help", "copyright", "credits" or "license()" for more information.
>>>
     ==================== RESTART: C:/Users/asif0/Desktop/Test.py ====================
     Enter the length of motif4
     Sequence AGAAGTTCGAGAAGCCGTAGT
     Size of the sequence 21
     Position 6
     Motif TCGA
     |


                                                                    Ln: 10   Col: 0
```