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Roll No.- 511
Subject – Bioinformatics
Topic – Motif Finding

Practical No: 6

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

Code:

```
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)
print("Position",pos)
motif=r[pos:pos+1]
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
```

Output:

```
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Try the new cross-platform PowerShell https://aka.ms/pscore6

PS E:\Python codes> python -u "e:\Python codes\motif.py"
Enter the length of motif4
Sequence AGAAGTTCGAGAAGCCGTAGT
Size of the sequence 21
Position 6
Motif TCGA
```