Experiment 4 : Write a program to find patterns in the given data using regular expressions by taking the data from text file.

In [2]:
```
import re
fp = open("abc.txt","r")

#match()
pattern1 = "sells"
if(re.match(pattern1,fp.read())):
    print("Match found")
else:
    print('Match not found')

fp.close()
```

```
Match not found
```

In [3]:
```
fp = open("abc.txt","r")
pattern2 = "She"
if(re.match(pattern2,fp.read())):
    print('Match found')
else:
    print('Match not found')
fp.close()
```

```
Match found
```

In [4]:
```
#search()
fp = open("abc.txt","r")
print(re.search("sea",fp.read()))
fp.close()
```

```
<re.Match object; span=(10, 13), match='sea'>
```

In [6]:
```
##findall()
##to find duplicates for specified pattern
txt = open("abc.txt","r")
res = re.findall(r"Kelly",txt.read())
print(res)
txt.close()
```

```
['Kelly']
```

In [7]:
```
txt = open("abc.txt","r")
res = re.findall(r"Kelly",txt.read(),re.I)
print(res)
txt.close()
```

```
['KELLY', 'Kelly']
```

In [8]:
```
#split()
txt = open("abc.txt","r")
x = re.split("sea",txt.readline())
print(x)
```

```
['She sells ', ' shells on the ', ' shore\n']
```

In [9]:

```
txt = open("abc.txt","r")
x = re.split(" ",txt.readline())
print(x)
txt.close()
```

```
['She', 'sells', 'sea', 'shells', 'on', 'the', 'sea', 'shore\n']
```

In [10]:

```
# sub()
#used to replace the substring with given pattern
fp = open("abc.txt","r")
x = re.sub("sea","yes",fp.readline())
print(x)
fp.close()
```

```
She sells yes shells on the yes shore
```