```
#import regular expression module
import re
#create data and pattern
pattern = 'python'
data='python is fast and easy to use. I have keen interest in python'
#apply search function to find first occurance of pattern
m = re.search(pattern,data)
print(m)
<re.Match object; span=(0, 6), match='python'>
#start index
print(m.start())
→ 0
#end index
print(m.end())
→ 6
#other programs related to different patterns and first occurance of python
p1 = r'pvthon'
d1 = 'python is fast and easy to use. I have keen interest in python'
m1 = re.search(p1,d1)
print(m1)
<re.Match object; span=(0, 6), match='python'>
\hbox{\it\#find first occurance of digit from data}\\
p2 = r'[0-9]'
d2 = 'python3.13 is fast and easy to use. I have keen interest in python'
m3 = re.search(p2,d2)
print(m3)
<re.Match object; span=(6, 7), match='3'>
#find first occurance of lowercase character from data
p2 = r'[a-z]'
d2 = 'python3.13 is fast and easy to use. I have keen interest in python'
m3 = re.search(p2,d2)
print(m3)
<re.Match object; span=(0, 1), match='p'>
#find first occurance of uppercase character from data
p2 = r'[A-Z]'
d2 = 'python3.13 is Fast and easy to Use. I have Keen interest in python'
m3 = re.search(p2,d2)
print(m3)
<re.Match object; span=(14, 15), match='F'>
#find first occurance of digit and uppercase character from data
p2 = r'[0-9A-Z]'
d2 = 'python3.13 is fast and easy to use. I have keen interest in python'
m3 = re.search(p2,d2)
print(m3)
<re.Match object; span=(6, 7), match='3'>
\mbox{\tt\#find} first occurance of digit and uppercase character from data
p2 = r'[A-Z0-9]'
d2 = 'python3.13 is fast and easy to use. I have keen interest in python'
m3 = re.search(p2,d2)
print(m3)
<re.Match object; span=(6, 7), match='3'>
#find first occurance of digit and lowercase character from data
p2 = r'[a-z0-9]'
d2 = 'python3.13 is fast and easy to use. I have keen interest in python'
```

```
m3 = re.search(p2,d2)
print(m3)

→ <re.Match object; span=(0, 1), match='p'>

#find first occurance excluding these characters or digits
p2 = r'[^p3f]'
d2 = 'python3.13 is fast and easy to use. I have keen interest in python'
m3 = re.search(p2,d2)
print(m3)

→ <re.Match object; span=(1, 2), match='y'>

Start coding or generate with AI.
```