

```
"""This program is to validate the date pattern"""
```

```
import re
```

```
# February only to the 28th
```

```
regex_01_to_28 = "((0[1-9]|1[0-9]|2[0-8])/02)"
```

```
# April, June, September, November have 30 days \
```

```
regex_01_to_30 = "((0[1-9]|[12][0-9]|30)/(04|06|09|11))"
```

```
# 'all the rest' have 31 days \
```

```
regex_01_to_31 = "((0[1-9]|[12][0-9]|3[01])/(01|03|05|07|08|10|12))"
```

```
#regex_00_to_96_by_4s := "([02468][048]|[13579][26])";
```

```
regex_04_to_96_by_4s = "([02468][48]|[13579][26]|[2468]0)"
```

```
# any century, any year (except 0000)\
```

```
#regex_0001_to_9999 = "([0-9]{3}[1-9]|[0-9]{2}[1-9][0-9]|[0-9][1-9][0-9]{2}|[1-9][0-9]{3})"
```

```
regex_0001_to_9999 = "(?=\d*[1-9])[0-9]{4}"
```

```
# February 29th \
```

```
regex_29 = "29/02/(([0-9]{2}" + regex_04_to_96_by_4s + ")|(' +  
regex_04_to_96_by_4s + "00))"
```

```
regex_valid_date = "(" + regex_01_to_28 + '|' + regex_01_to_30 + '|' +  
regex_01_to_31 + ")" + "/" + regex_0001_to_9999 + ")" + "|" + regex_29
```

```
## Take input from the user
```

```
dat = raw_input(" Enter date in dd/mm/yyyy format : ")
```

```
#compile function update the regular expression pattern. Basically add r'  
into pattern variable
```

```
p = re.compile(regex_valid_date)
```

```
# search function does not need pattern here as it is being updated using  
compile function
```

```
match = p.search(dat)
```

```
if match :
```

```
    print "correct date: ", dat
```

```
else :
```

```
    print "Error: %s not valid date. Please enter correct date. " %dat
```