

```
/**
```

```
Pattern p=Pattern.compile("[abc]"); // pattern is a compile version of Regular expression of the  
object passed and to create the object use compile()
```

```
Matcher m=p.matcher ("abbbaabbba");
```

in pattern argument passed below in "[]"

1. [abc] -> either a or b or c
2. [^abc] -> except a.b.c all the letters Note: '^' is negation symbol that is not this
3. [a-z] -> any lower case symbol from a to z
4. [A-Z] -> any upper case symbol from A to Z
5. [a-zA-z] -> all the alphabet symbols
6. [0-9] -> any digit from 0 - 9
7. [0-9a-zA-Z] -> any alphanumeric symbol
8. [^0-9a-zA-Z] -> any symbol except this characters i.e all special characters

*****above are know as character classes *****

Example:

```
String x=[];
```

```
Pattern p=pattern.compile(x);
```

```
Matcher m=p.matcher("a 3 b # k @ 9 z");
```

```
0 1 2 3 4 5 6 7
```

```
x=[abc] // o/p = 0...a 2...b
```

```
x=[^abc] // o/p = 1...3 / 3...# / 4...k / 5...@ / 6...9 / 7...z
```

```
x=[a-z] // p/p = 0...a / 0...b / 4...k / 7...z
```

```
x=[0-9] // o/p= 1...3 / 6...9 /
```

```
x-[a-zA-Z0-9] // o/p= 0...a / 1...3 / 2...b / 4...k / 6...9 / 7...z
```

```
x=[^0-9a-zA-Z] // o/p = 3...# / 5...@
```

***** predefined classes *****

\s => space character

\S => except space character

\d => any digit character [0-9]

\D => except digit from [0-9]

\w => any word character [0-9a-zA-Z]

\W => except any word character [special symbol]

. => any character all symbols

```
String x=[];
```

```
Pattern p=pattern.matcher(x);
```

```
Matcher m=p.matcher("a3b k@9z");
```

```
01234567
```

```
x=\\s => 3...
```

```
x=\\S => 0...a 1..3 2..b 4...k 5..@ 6..9 7..z
```

```
x=\\d => 2..1 6..9
```

```
x=\\D => 0...a 2..b 3... 4...k 5..@ 7..z
```

```
x=\\w => 0...a 1..3 2..b 4...k 6..9 7..z
```

```
x=\\W => 3.. @..5
```

```
x=. => 0...a 1..3 2..b 3... 4...k 5..@ 6..9 7..z
```

*****Quantifiers*****

we use this to specify the number of occurrences to match

1. a => exactly one a

2. a+ => at least one a

3. a^* => any number of a's including zero number also

4. $a?$ => at most one number of a

```
String x=[];
```

```
Pattern p=Pattern.compile(x);
```

```
Matcher m=p.matcher("abaabaaab");
```

```
012345678
```

```
x=a => 0..a 2..a 3..a 5..a 6..a 7..a
```

```
x=a+ => 0..a 2..a 5..a
```

```
x=a* => 0..a 1.. 2..aa 4.. 5..aa 8... 9...(it searches for end +1 position )
```

```
x=a? => 0..a 1.. 2..a 3..a 4.. 5..a 6..a 7..a 8.. 9...(it searches for end +1 position)
```

```
*****split method*****
```

```
Pattern p=Pattern.compile("\\s");
```

```
String[] s=p.split("mayuresh sunil Zende")
```

```
for(String s1:s)
```

```
System.out.println(s1); //mayuresh \n sunil \n zende
```

```
2) Pattern p=Pattern.compile("s"); => mayure \n h \n unil zende
```

```
3) Pattern p=Pattern.compile("\\."); or we can use ("[.]")
```

```
String[] s=p.split("www.mayuresh.com");
```

```
for(String s1:s)
```

```
System.out.println(s1); // o/p we will get the string separated by . i.e www \n mayureh \n zende
```

```
*****to validate mobile number ***** (10 digit )
```

```
Re is => [7-9][0-9]{9} // i.e first number is 7/8/9 and next 9 digits can be anything
```

for 11 digit we can add 0?[7-9][0-9]

for 12 digit we can add (0/91)?[7-9][0-9]

*****for mail iD we can use the*****

Re [a-zA-Z0-9][a-zA-Z0-9_]*@[a-zA-Z0-9]+([.][a-zA-Z+])+

-----for sppecific gmai use -----

Re [a-zA-Z0-9][0-9a-zA-z_]*@gmail[.]com

****for language identifer *****

rules

1) a-k

2) [0369]//divisible by 3

3) {a-zA-Z0-9\$#}

RE [a-k][0369][a-zA-Z\$#]*

*/