

## Simple Regular Expression

var pattern;

????

?????, ??^, \$, (, ), {, }, +, \*, ., ?, |, [, ], ????????????, ????????????. ?????????????????????? \.

pattern=\\;

pattern=^/;

pattern=\\\$/;

pattern=^+/;

pattern=\\\\/;

//etc, .....

????

?????????????, ??????????????????, ??????????: Enter????, ??????....

pattern=\\t/; //????; horizontal tab

pattern=\\n/; //???; newline

pattern=\\r/; //Enter; carriage return

pattern=\\f/; //???; form feed

pattern=\\a/; //alert??: alert bell

pattern=\\e/; //escape??: escape

pattern=\\v/; //??????: vertical tab

pattern=\\0/; //??

pattern=\\x65/; //xN|N is hex format. N=65=>A; N=97=>a

????

???, ???, ???, ??????????.

>???:

?? [] ?????? ?/OR ???.

pattern=/[123]/; //???????????, 1, 2??3.

>???:

?????? NOT ??.

pattern=/[^abcdef]/; //????a, b, c, d, e?f?????.

>???:

?????????????(Range)?.

pattern=/[a-z]/; //????a?z?????.

pattern=/[A-Z]/; //????A?Z?????.

pattern=/[0-9]/; //????0?9?????.

pattern=/[a-zA-Z0-9]/; //????a-z, A-Z??0-9?????????.

pattern=/[^0-9]/; //????, ??0?9?????.

pattern=/[^a-z0-9]/; //????a?z?0?9?????.

>???:

???, ??????????????.

pattern=/[A-Z0-9.]/; //????A?Z, 0?9?..?.

>????:

?????????, ??????????????????????.

pattern=\\.;/; //[^\\n\\r]

pattern=\\d/; //[0-9]

pattern=\\D/; /^[^0-9]

```
pattern=/\s/; //[\t\n\x0B\f\r]
pattern=/\S/; //[^ \t\n\x0B\f\r]
pattern=/\w/; //[a-zA-Z_0-9]
pattern=/\W/; //[^a-zA-Z_0-9]
```

??

????????????, ??????. ????: \*, +, ?, {n}, {n,}, {n,m}.

```
pattern=/a*b/; // * ?????????????0?????????. a*b?????b, ab, aab, aaab, ....
```

```
pattern=/a+b/; // + ??????????????????????. a+b?????ab, aab, aaab, ....
```

```
pattern=/a[cd]?/; // ? ?????????????0???1?????. a[cd]?????a, ac, ad.
```

```
pattern=/\d{2}/; // {n}|n is number and n>=0????????????n?????. \d{2}?????\d\d.
```

```
pattern=/\w\d{2,}/; // {n,}????????????>=n?????. \w\d{2,}?????a12, b456,...
```

```
pattern=/ba{1,3}/; // {n,m}????????????n?,?m?????. ba{1,3}?????ba, baa, baaa.
```

Examples:

```
pattern=/\$\d+\.?d*/; \\\\\????, \\\$??$, \d+?????, \.??0?1?, \d*??0???. ??: $910, $13.5, $12.58
```

```
pattern=/\d{3}-\d{7-8}/; \\\\\?????, \d{3}?????, \d{7-8}?????????, ??8?.
```

**Greedy Qualifier**

?????????????????. Regular Expression???Greedy.

```
pattern=/a\d+/; \\\\\?a1, a12, a974, a6521, a75392, a852433281
```

```
pattern=/fo{2,}/; \\\\\?foo, fooo,foooo, foooooooo
```

**Lazy Qualifier**

?Greedy Qualifier?????. ??????. ?????????????0?1?????. ?? ? ?????.

```
pattern=/a\d?/; //??a1, a2, a3, ..., a9?????.
```

```
pattern=/pk\d{3,4}?/; //\d{3,4}?????3??\d. ?\d{3,4}=t, t?????????1?.
```

```
pattern=/a\d+?/; \\\\\a15422222?????, /d+?????1.
```

```
pattern=/fo{2,}?/; \\\\\?o{2,}?????oo.
```

## Complex Regular Expression

???Simple Regular Expression, Complex Regular Expression?????????????. ????, ????, ??, ??????, ??, ?????????  
????.

??

????????, ??????????:

1. ?????????????????

2. ???pattern????????, ??????????pattern????????, ??????????.

3. ?????, ?????, ??????????. ???pattern????, ???0. ??????1??.

???????? () ??, ?????????????.

```
pattern=/a1b2c3}{3}/; //????a1b2c3, ??????. ?t=a1b2c3, ???ttt????.
```

```
pattern=/abc(\d+)/; //????????abc, ???(\d+)?????????1???. ????: abc1, abc32, abc985
```

```
pattern=/abc(123))/; //?????????????.(123)?????????2. ??(abc)????1
```

????

????????????????, ?????????. ????? \num, ?num???, ???????.

```
pattern=/(\w)\1{4}/; //\w?[a-zA-Z_0-9], ?t=(\w), \1{4}????$1????, ?????4?, ????: rrrr, 5555.
```

??

????????????????????????, ??????. ????? expression1|expression2, ??? | ?????.

```
pattern=/John|Jack/; //????John?Jack????.
```

```
pattern=/("|'").*\1/;
```

/\* ("|")???? ' ?? " ????, ??????\$1, .\*????[^\n\r]?0????????, ??????? ? ?Lazy Qualifier??, ??????????. ??\1?????\$1  
 ??????, ???("|"). ??????: "color", '1', "a2". \*/

??????

????????????????, ?????????, ?????????????????, ??????????????\num??. ??????" ?????????, ?????????????????, ?????????  
 ?????? ".

????????? (? :pattern) ??????

pattern=/pro(?:gram|ject)/; //gram?ject????????, ??????????. ????: program??project.

????

????????, ??????:

1. ?????????????????.

2. ?????????????????. ?????????????????????.

3. ??(=?pattern)?????.

pattern=/bed(=?room)/; //????: bedroom, ??room????????, ??????????. ??????bed.

pattern=/Windows(=?2000|XP)/; //????:Windows2000?WindowsXP, 2000?XP????????????????.

????

????????????????????, ??????????????????????pattern. ??????????????:

1. ?????????????????.

2. ?????????????????. ?????????????????????.

??????(?!pattern)?????.

pattern=/bed(?!room)/; //?????bedroom?????. room????????????????. ????bed.

pattern=/Windows(?!2000|XP)/; //?????Windows2000?WindowsXP?????. 2000?XP????????????????.

?????

????, ?????????????.

^, ?????????.

\$, ?????????.

\b, ?????????, ?????????????????????????????, ????, ?????????.

\B, \b?????

pattern=/^aaa/; //?????????????a?????. ????: aaa xxx sss; ??????: sss aaa zzz

pattern=/aaa\$/; //?????????????????????????. ????: ccc ddd aaa; ??????: xxx www aaa zzz.

pattern=/^I am John\$/; //?????^???\$?????. ????: I am John; ??????: Hi, I am John!...

pattern=/\bCSharp\b/; //?????????\b??? \b??. ????: PGR Language CSharp , Yaaa;(CSharp???)

pattern=/\BJava\b/; //\b??? . ????: This is OO language [Java!]; ??????: This is OO language Java .

## Operator priority

????????????????????, ??????????. ?????????????????????.

???: ???> ??> ??> ???> ??

?????: \

?: (), (? :), (? =), []

?: \*, +, ?, {n}, {n,}, {n,m}

?????: ^, \$

???: |