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C ( M N 8 O G ; ( P @ Q R S T U V W @ A D X Y Z [ \ L  
] < ^ \_ @ ` a ' b c C ( d e f ! " # \$ % g h i j @ k l ` ' @ R S m n o p ; q r s t u N o L

D v w ; @ 8 x y M O G ; z L / { ; @ | } D ~ • € @ • C y R S , f „ @ … C † ‡ ^ % Š < Æ L  
] • @ | } Ž € @ ` a X c 6 < = ; • R @ • ' ; Š ' " " • E – – ; L

8 ( — ~ Y 6 ; ™ Š

8 ( > Y Asc i doc œ % • Ž L

Ÿ Y [Asci i doctor](#) j 8 ( ¢ £ - L

¤ ¥ :

¥ | § ¤ ¥

¥ ¨ © PDF ¤ ¥

( <sup>a</sup> Y ; R « ¬ - ® M <sup>-</sup> [Regul ex](#) ! " # \$ % R « ¬ ™ Š % ° L

± <sup>2</sup> - ® M <sup>-</sup> [Processon](#) — ~ L

3 ´ µ ¶ ·

` ag³ ´ ¸ = · ¹ ; ° @RS» ¼½¾So¿ %ÀÁ6| L

¥ +ÃÃ

¥ ÄÅ

¥ ÆÇ

¥ qdl aoyao@126.com

\_È - 8ÉÊ@EŽ7ËÉÊÌ

9JavaScript ! " # \$ % &amp; ' ( :

34

ˆ Z8( Mˆ Í ^ Î Ï ÐÑÒ° @34ÓÔÕ&lt;=; Ö×L

34ØÙ@MÚ/ | ÛÜ7ÝÞßž`àx; L

34ŠD@ÚŽ`á¿pâãä| i j @åpMÚæç; L

34Šèq@Údé( êëäì í î ï d@đñàäòó; ÐÑ³ ´ L

34ôõ; Ö×@Úö| æç`ä`áÍ`åp@÷æøù+ú@ûâ\_È - 8L

ü\_@ý±þ34Óÿf! i | ž; " # \$ L Ú%; &' D( 2\_` oÌ f) \* +, Šèq, Jack  
Lo, ¥\$- DD, . Ø^ / O+1, Î 2, \_34, Dark\_NightL

" # \$

! " # \$ % N» M| ; NÍ 56@7á^ " • } 8| N9: Ž; < ; => LAM! " # \$ %; ÿY?  
@ABCD@ý±Ž#Eï F7Í GHoÉMDR, I L78Š( YNÍ NÍ ; ŠJ ËKLMàî N  
?ä! " # \$ %; OPY\$@Qc N<L

Ñ f) \* +

| RÈ5ä) \* ŽST; ! " ÁU; +VW@XDYZy[ uä@Ò\ ] ^\_` • aä) \* @b€6  
) \* def8cdefK@] ghNi j kyMl mLŽ8ÁUª @| noüK; pq° MÒ! " #  
\$%Mrst%@purs' v@pursÿwÓµÒdZÿw; xy@| %RSxy° z' vÓ@  
7pq° R{ M| } ~• @½¾€' ; • ÿ( , v7Í J ËÜf+N» „ D...†; 2ë‡, ^ %„ Š  
äL{ M< (E) \*; xyµ• yXŽLò• | @½<&' Š( @RS• ' {! xy! " ðŽ™~ª D  
' <@D' ž! " L•! " ° ö' ' , ª; NÜ" " L

Ñ Šèq

7MN8<sup>-</sup> MLK\ • • ò- ; ! " ( P@—äpk ; ~ ®J K™8hš 5^ ä@c> Z) \* ¥\$œ;  
• ž ŸS ĭ €; î ' # \$ XŽ@£8¤¥ ħ §; ! " Äa@¨ c...©\g<sup>a</sup> R« ¬

Ñ Jack Lo

) \* • ž ; JavaScript! " # \$ % ÁUî Ĩ ½- ®½@<sup>-</sup> • NJ SJavaScript• ž @AMdZ! " #  
\$%; ef ½YZ ±Ú ħ , LhS@D° QM+ Â±M\_Â™¥² @½¾³ <C&' ( ´Xµ> L ü  
\_@34) \* X¶ž à 7NÁUî Ĩ @• f• X¶É , ¹ ; xyµŸY! " # \$ % L

Ñ ¥\$ - DD

! " # \$ % M½Y ; ° X@» ¼; Þß½¾¿ D' LXŽÀÁ<sup>a</sup> êëÄÃ@ðÄ° S¹ @ÉMNÂQ  
cef ; ¿ %L} yÆÍ ŠJ ; JK@5^ 78- î ðÇ, ÈÉÀÁ; ¤¥f\_@' E, Ê• ' ; Ê  
s±Ä±RSÌ Í Î oL

Ñ . Ø^ / O+1

8( Ĩ " , ÐJ , £xÑÒ@• yÓ^ @MN8DRác ; ! " # \$ % L Ô, êÕÖxLØ° ' MÜ  
LÔ; ŠÚ@±MgÛF ; ¥\$œ@´ X...78( e67á ÞßL7RXM ħ <¾; üÜŠ ; N8!  
" ¤¥L34~ =) \* ; ™~ L

Ñ Î 2

Ý² ®c@> ? ÞwL™~ <sup>a</sup> c6ä) \* ; 7á ĭ j @7M34LüÉß<ä) \* ; ! " # \$ % N(  
@à> áM@...â ĭ ã6! " . ¹ @...ä å6• ' ( ž@´ æD' ( <sup>a</sup> ; ÄaLð\C( ½- ®Š@  
Çx...©@â ĭ ³ < ´ Ec6Ê; èµL34) \* @Öx' @éê ¬

Ñ \_34

dZ! " ; Äa@f+5cÂMëë~ ~ ; @bgÜÜî ĩ Áí ef¾@hSŽ¿ pÄaî Áòdĩ  
ðL½¾78! " &' ( @ÃñgNí ...©òóLN» Sxøùôõ~ =; ö÷µî Ĩ @• cŽJS;  
° ø‡} à> Z\* ù ĭ j @34Úd78( ; úà@ûü78&' ( Xi j Éá€ef! " ; ýeL

Ñ Dark\_Night



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€ \$ ' } ä y ! " ; % p Ÿ L Ž | 5 x @ ! " # \$ % M &amp; ' ¥ \$ œ ( Ô ; N Í ) p \* + L

8 ( ; , ; @ M û ü h g • { &lt; ^ ; &gt; ? % @ X { ! î e E ð ó Y ! " # \$ % L

8 ( - . / g O Ĩ @ ^ 1 î 2 ° ä JavaScript | , ; ! " # \$ % ¿ ¿ p p L

š î ĩ 3 ` o ĺ

¥ h N Ĩ ! " # \$ % ' v r s 4 5

¥ h q ĩ ! " # \$ % Ÿ w r s 4 5

¥ h V Ĩ ! " # \$ % 6 7 ; ~ Y

¥ h 8 Ĩ ! " # \$ % 9 : § £ x

¥ h ; Ĩ ! " # \$ % ; &lt; (

¥ h = Ĩ ! " # \$ % ; \_ j

¥ h O Ĩ ! " # \$ % • ¥

o p Î E î / / â N Ĩ ´ 2 ° ä &gt; u ?

! " M r s t % @ p u r s ' v @ p u r s Ÿ w L

h N Ĩ µ h q ĩ S 7 Í @ å î • y ä ! " # \$ % ; » ¼ L

Ž ! " R S Ÿ Y 6 7 A µ € B @ p u Ž A P I ª ê ë ( C D Y @ p u Ž ! " Ě ê ë E O D Y L

7 M h V Ĩ ; F ¹ @ • y ä ! " # \$ % ª 6 7 ; ~ Y L

e f ! " @ M G p ä y ± r s £ x ; L

h 8 Ĩ @ • y ä ! " # \$ % ; 9 : § £ x L

H I Ž h = Ĩ ü \_ N 3 @ } • y ä ! " ; # \$ % ; 1 î ™ ~ £ x L

D J X 5 Š K ^ ; ! " @ ± p • ´ E Ž ! " L

h ; Ĩ @ M ... &lt; ; @ å @ î &lt; ( N Í ! " # \$ % @ Ò h = Ĩ M ... Ž ; @ å @ î \_ j N Í ! " # \$ % L

e f ! " @ M ö ä Ž { Ä L M Ě ó Y ; L

hOĭ • y ä ! " ; Y§@μòô API Gpõ³ ; î ĵ L

˘ • ' RS» ¼³ <' €äy; NONĭ @A | ±Mĭ P...Q6Rî ^ 1³ <L 8( M&' ( @DS; L

üÜ³ <pTLhNT@DwUyî VW³ <NTL³ <¾¥ª ã 6; · ¹ DX÷Yox@} Z³ <^ [ \_  
yXy\ 7áL

• \_gJ K; ° @ĭ ] ^ · ¹ î Í <hqTL

K\_` @' a | %; ! " # \$ % b ¥ c L

| Ž d 6 e ' L

# 1. hNĩ ! " # \$ % ' v r s 4 5

! " # \$ % Mr s t % @ p u r s ' v @ p u r s y w L f ÷ g 7 q ° L

• Ò ô Z ! " ` O r s ' v ; e f @ f h ( ^ ´ b c 7 i ø ù j k L

[ l m ' v n á ä @ 5 o x b g Á í ÿ @ D Ü ÷ L 8 ĩ y y \ 7 Í · ¹ L

- . p 6 ĩ

¥ p Å t q r s

¥ ' v C

¥ ' r

¥ ( Ö Ã

¥ Ð J ( s

## 1.1. p Å t q r s

` a ! " t g í u r s M b á f ³ v ; @ ø ` / h e l l o / @ } t X r s ' v w ª ; " h e l l o " 7 Í £ w L

```
var regex = /hello/;
console.log( regex.test("hello") );
// => true
```

! " # \$ % f h S v f @ M x ö ± X Ä Ê t q r s L

Ò t q r s @ g p í ¿ O ‡ ; Ò t q Ó ĩ y O t q μ z O t q L

### 1.1.1. y O t q r s

y O t q { ; M @ N í ! " R r s ; ' v w ; ø å D M | • ; @ R S M á Å = > ; L

± Ä Ê ; ¿ % M Y Y ' r L } ` { m , n } @ # N R È à Ê ü ~ m i @ ü á n i L

ø ` ! " / a b { 2 , 5 } c / # N r s 7 9 N í ' v w ĩ h N í ' v M " a " @ ¼ o x M 2 6 5 í ' v " b " @ ü \_ M ' v " c " L

± R « ¬ Ä % ` o ĩ

• € ` o ĩ

```
var regex = /ab{2,5}c/g;
var string = "abc abbc abbbc abbbbc abbbbbc abbbbbbc";
console.log( string.match(regex) );
// => ["abbc", "abbbc", "abbbbc", "abbbbbc"]
```

NOTE

ĐJ<sup>a</sup> Y; ! " M /ab{2,5}c/g@±<sup>a</sup> g M! " ; NÍ Đ• v L# Né, r s@f@Ž,  
 \* ' v w<sup>a</sup> „ ] \$...6†‡r s t %; hg£w@v<sup>^</sup>; MÒhgÓ@ÒDt MÒhNÍ Ó  
 L g MEr global ; 1' %oL

### 1.1.2. zOt q r s

zOt q{ ; M@NÍ ! " r s; ' v w@šî 6ŠNÿ' vJ@< RSDMŠÍ u•; ' v@RSgáÅ  
 RXL

±ÄÊ; ħ %MÿY' vCL} ` [abc]@#NÛ' vMRS' v "a", "b", "c" <sup>a</sup>; NONÍ L

ø` /a[123]b/ RSr s` oVÅ' vwl "a1b", "a2b", "a3b" L

±R« ¬Ä%` o ĩ

• € ` o ĩ

```
var regex = /a[123]b/g;
var string = "a0b a1b a2b a3b a4b";
console.log( string.match(regex) );
// => ["a1b", "a2b", "a3b"]
```

S†yM8Ĭ •; Fî - . @t pòóyOµz Ot q r s@yXy\7fh(! " r s. ' L

¼ox@| %£šî • ' x / L

## 1.2. ' v C

Gpv<sup>^</sup>; M@<sup>-</sup> Ž' v C™' v; Š@At M±<sup>a</sup> NÍ ' v L

J` [abc]@#Nr s NÍ ' v@< RSM "a", "b", "c" fNL

## 1.2.1. ? @ # N \$

` a' v CĚ; ' v • K á; ° @ • u' ? RSŸY? @ # N \$ L

ø` [123456abcdefGHIJKLM]@RSž ° [1-6a-fG-M]LYR' v - x' 5µÎ ž L

xöR' vg• " Y" @ • u p r s "a", "-", "z" 7V=ª N³ NÍ ' v @ Ů • u — — ?

DXž ° [a-z]@x ö ± # N Š ž ' vª ; NONÍ ' v L

RSž ° ` o; ħ % Ĩ [-az] , [az-] , [a\z] L

fpu~ ž' Q@pu~ ž ĀR@pu" v L Â fDE • D™ • öM? @ # N \$ y ä ä L

## 1.2.2. Š &gt; ' v C

zOt q r s @ ± g N Å = Ä y M @ Š Ÿ ' v R S M N O P ß @ A y D X M "a", "b", "c" L

CJ y M Š > ' v C™ E v' v C Š; æ • L J ` [^abc]@ # N M NÍ > "a", "b", "c" f I ; N³ NÍ ' v L' v C; h N Ÿ ~ ^™ ž ' v š @ # N w E; æ • L

] • @ } g ò ó; ? @ # N \$ L

## 1.2.3. B ´ ; Î ž Ä %

gä' v C; æ • \_ @ N Ý B ´ ; v 7 | % } y x y ä L x ö < % ´ M Á í • ] ; Î ž Ä % L

' v C	š î Ÿ v
\d	# N [0-9] L # N M N Ÿ € ' L ÷ ħ % Ĩ ± Ĩ Î M digit™ € ' š L
\D	# N [^0-9] L # N > € ' I ; N³ ' v L
\w	# N [0-9a-zA-Z_] L # N € ' , f Š ž ' % µ ο ϕ £ L ÷ ħ % Ĩ w M word ; Î ž @ } / E r ' v L
\W	# N [^0-9a-zA-Z_] L A E r ' v L
\s	# N [ \t \v \n \r \f ] L # N z Ú v @ p ó z æ , ( Ô — # v , ¨ » — # v , © ë v , 9 ¥ v , ©   v L ÷ ħ % Ĩ s M space ; 1 ' % @ z Ú v ; E r M white space L
\S	# N [ ^ \t \v \n \r \f ] L A z Ú v L
.	# N [ ^ \n \r \u2028 \u2029 ] L ½ s v @ # N Å N³ ' v L © ë v , 9 ¥ v , ë ( , v µ § ( , v > I L ÷ ħ % Ĩ € € ' 57 Éª ; â Í 6 @ ´ R S x y ° " Ÿ v @ # N N O ; < ; Þ ß L

` a p r s N³ ' v • u' ? RSŸY [\d\D], [\w\W], [\s\S] µ [^]ª NO; NÍ L

S ‡ Ó' v C d ó; R « ¬ Ä % M Ĩ

### 1.3. ' r

' r } / % © L ò ó { m, n } ; + u Ÿ v \_ @ t G p ÷ g N Ý Î ž Ä % L

#### 1.3.1. Î ž Ä %

' r	š î Ÿ v
{ m, }	# N <sup>a</sup> ~ à Ê m i L
{ m }	e « Z { m, m } @ # N à Ê m i L
?	e « Z { 0, 1 } @ # N à Ê <sub>„</sub> = D à Ê L ÷ ¿ %   · 7 ; <sup>3</sup> ¬ # N @ g - ?
+	e « Z { 1, } @ # N à Ê <sup>a</sup> ~ N i L ÷ ¿ %   é 7 M ® é ; <sup>3</sup> ¬ @ c 2 g N Í @ • _ <sup>-</sup> ° ± ® é L
*	e « Z { 0, } @ # N à Ê N <sup>3</sup> i @ g R X D à Ê L ÷ ¿ %   5 5 k ‡ ; <sup>2</sup> <sup>2</sup> @ R X N <sup>3</sup> b g @ R X ë ´ g Æ <sup>3</sup> @ R X € } € D <sup>¾</sup> x L

S ‡ ' r d ó ; R « ¬ Ä % M Ĩ

#### 1.3.2. μ ¶ r s · „ Ÿ r s

5 ` o ; J £ Ĩ

```
var regex = /\d{2,5}/g;
var string = "123 1234 12345 123456";
console.log( string.match(regex) );
// => ["123", "1234", "12345", "12345"]
```

±<sup>a</sup> ! " /\d{2,5}/@ # N € ' R È à Ê 2 6 5 i L E r s 2 ÿ, 3 ÿ, 4 ÿ, 5 ÿ R È € ' L

A M ± M μ ¶ ; @ < E<sup>1</sup> R X á ; r s L' X â | 6 Í @ | y p 5 Í L' X â | 3 Í @ | y p 3 Í L  
E ! t p Ž X Ž ? @ - @ ° á ° Ü L

| % Ä » g J μ ¶ D M N ¼ Ü ½ ™ f 5 Î Ĩ ü \_ N Í J £ š L Ò „ Ÿ r s @ y M<sup>1</sup> R X ~ ; r s Ĩ

```
var regex = /\d{2,5}?/g;
var string = "123 1234 12345 123456";
console.log( string.match(regex) );
// => ["12", "12", "34", "12", "34", "12", "34", "56"]
```

±<sup>a</sup> /\d{2,5}?/ # N @<sup>-</sup> • 2 6 5 i ´ ë @ ] 2 Í y ¶ ; J ¾ @ y D Ĩ ¿ o Ä € ä L

½¾Ž' r \_péÍ · 7yXÂÊ , Ÿrs@xChg , Ÿrs=Ä` oĭ

Ÿ' r	μ¶' r
{m,n}?	{m,n}
{m,}?	{m,}
??	?
+?	+
*?	*

TIP | d , Ÿrs; ÷ ċ %Mĭ ' r \_péÍ · 7@· N· ' Ä±ä - @' 7μ¶ - ?

S± , Ÿ' r dó; R« ¬Ä%Mĭ

## 1.4. á Á ( Ö

NÍ t %RSÂÊyOμzOt qrsLÒáÁ( ÖRSÖxáÍ £t %NÁ±NL

šî Ä%` oĭ (p1|p2|p3)@±ª p1, p2 μ p3 M£t %@Y |™Â»vš( , @#N±ª NOƒNL

J` þrs' vw "good" μ "ni ce" RSŸY /good|ni ce/L

R« ¬Ä%` oĭ

• €` oĭ

```
var regex = /good|ni ce/g;
var string = "good idea, nice try.";
console.log( string.match(regex) );
// => ["good", "nice"]
```

AgÍ ½À | %óÛō³ @ø` | Y /good|goodbye/@ì rs "goodbye" ' vwJ @ÃaM "good"ĭ

```
var regex = /good|goodbye/g;
var string = "goodbye";
console.log( string.match(regex) );
// => ["good"]
```

ÖÜ! " Ñ° /goodbye|good/@ÃaMl

```
var regex = /goodbye|good/g;
var string = "goodbye";
console.log( string.match(regex) );
// => ["goodbye"]
```

} yM/ @( ÖÃ } M, Ÿ; @f] +p; r s ‡ ä @ \_p; y Dl Å€ ä L

## 1.5. ÐJ ( s

r s' v@ØAyM' vC, ' r µ( ÖÃ ; CÃŸYÄäL

op...ÆÍ J £ÅÆNo™±ª @âÍ ! " ðDMt gÇNž Ššl

### 1.5.1. r s 16 ê—ÈÉQ

pwr sl

```
#ffbbad
#Fc01DF
#FFF
#ffE
```

( sl

#NNÍ 16 ê—' v@RSY' vC [0-9a-fA-F]L

±ª ' vRSàÊ 3 , 6 i @GpMY' r µ( ÖÃ L

ŸY( ÖÃ J @Gpö³ ] \$L

! " ` ol

```
var regex = /#([0-9a-fA-F]{6}|[0-9a-fA-F]{3})/g;
var string = "#ffbbad #Fc01DF #FFF #ffE";
console.log( string.match(regex) );
// => ["#ffbbad", "#Fc01DF", "#FFF", "#ffE"]
```



± R « ¬ Ä % ]

## 1.5.2. r s J K

S 24 Š J – ö J L

p w r s l

23:59  
02:07

( s l

/ 4 ÿ € ' @ h N ÿ € ' R S ö [0-2] L

] h 1 ÿ ö " 2 " J @ h 2 ÿ R S ö [0-3] @ ± Ú = &gt; J @ h 2 ÿ ö [0-9] L

h 3 ÿ € ' ö [0-5] @ h 4 ÿ ö [0-9] L

! " ` o l

```
var regex = /^[01][0-9]|[2][0-3]:[0-5][0-9]$/;
console.log( regex.test("23:59") );
console.log( regex.test("02:07") );
// => true
// => true
```

NOTE

! " ª ÿ Y ä ^ μ \$ @ ( K # N ' v w ' Q μ Ã R L š î Ê í f Ě ° h q Ĭ L

` a } p w r s "7:9"@} y M / J ( + p ; "0" R S ' 5 L

C J ! " " ° ĭ

```
var regex = /^(0?[0-9]|1[0-9]|[2][0-3]):(0?[0-9]|[1-5][0-9])$/;
console.log( regex.test("23:59") );
console.log( regex.test("02:07") );
console.log( regex.test("7:9") );
// => true
// => true
// => true
```

± R « ¬ Ä % ĭ

### 1.5.3. r s Ĭ Í

ø ` yyyy-mm-dd æ % ö J L

p w r s ĭ

2017-06-10

( s ĭ

Î @ 8 ŷ € ' f R @ R Y [0-9]{4} L

İ @ / 12 Í İ @ ( p Å = &gt; "01", "02", É , "09" μ "10", "11", "12" @ R Y (0[1-9]|1[0-2]) L

ĭ @ ü f 31 k @ R Y (0[1-9]|[12][0-9]|3[01]) L

! " ` o l

```
var regex = /^[0-9]{4}-(0[1-9]|1[0-2])-(0[1-9]|12[0-9]|3[01])$/;
console.log( regex.test("2017-06-10") );
// => true
```

± R « ¬ Ä % l

#### 1.5.4. window Ð ~ Á í Î ¼ Ñ Ò

p w r s l

```
F:\study\javascript\regex\regular expression.pdf
F:\study\javascript\regex\
F:\study\javascript
F:\
```

( s l

1 î t % M:

Ó v : \ Î ¼ Ô \ Î ¼ Ô \ Î ¼ Ô \

±<sup>a</sup> r s " F : \ " @ G p ÿ Y [ a - z A - Z ] : \ \ @ ±<sup>a</sup> Ó v D Ö ( f Š ž @ ö<sup>3</sup> \ ' v G p " v LÎ ¼ & , = Î ¼ Ô & @ D X p ÿ N Ý • " ' v @ C J | % G p š > ' v C [ ^ \ \ : \* < > | " ? \ r \ n / ] x # N Ä §  
' v LH I < % ; & ' D X ö z & @<sup>a</sup> ~ g N í ' v @ } y M p ÿ Y ' r + L x C r s Î ¼ Ô \ @ R Y  
[ ^ \ \ : \* < > | " ? \ r \ n / ] + \ \ LH I Î ¼ Ô \ @ R S à Ê N<sup>3</sup> i L } y M ([ ^ \ \ : \* < > | " ? \ r \ n / ] + \ \ ) \* L ±<sup>a</sup> 6 7 # N ± - h ! " M N í 1

î L š î Ê í f Ě ° h V Ĩ L

Ñ Ò; ü \_ Nh ( R S M Î ¼ Ô @ b g \ @ x C G p Ö é ([^\\: \* < > | "? \r \n /] +) ? \$ /; L

ü \_ x ¼ ° ä N Í 5 o x ø ù © j ; ! " l

```
var regex = /^[a-zA-Z]:\\([\\: * < > | "? \r \n /] +) * ([^\\: * < > | "? \r \n /] +) ? $ /;
console.log( regex.test("F: \\study\\j avascript\\regex\\regular expression. pdf") );
console.log( regex.test("F: \\study\\j avascript\\regex\\") );
console.log( regex.test("F: \\study\\j avascript") );
console.log( regex.test("F: \\") );
// => true
// => true
// => true
// => true
```

± ª @ Ž JavaScript ª ' v w p # N' v \ J @ } G p ¨ v L

± R « ¬ Ä % l

### 1.5.5. r s i d

p w ...

```
<div id="container" class="main"></div>
```

ñ Ø à i d = " c o n t a i n e r " L

R X ü ' a € 6 ; ! " M l

```
var regex = /id=". *"/
var string = '<div id="container" class="main"></div>';
console.log(string.match(regex)[0]);
// => id="container" class="main"
```

± R « ¬ Ä % l

xö . M½sv@8cyr sÛD7; @Ò' r \* ÚMµ¶; @] ã 6 container \_pÛD7J @MDE  
Ûox@EÛÈr s@» 6ã 6ü\_NÍ ÛD7öÝL

y\ f» @RSÿY, ÿr sĭ

```
var regex = /id=".*?"/  
var string = '<div id="container" class="main"></div>';  
console.log(string.match(regex)[0]);  
// => id="container"
```

] • @79} EgÍ · ¹ LPßøùà@xö±r s£xEá 6Ò9: Ó7Í œ• ™7Ě} tM] UñN  
o@h8Ĭ EĚí /OšLRSâ ¬` oĭ

```
var regex = /id="["']*"/  
var string = '<div id="container" class="main"></div>';  
console.log(string.match(regex)[0]);  
// => id="container"
```

## 1.6. 8Ĭ ŠÃ

òó' vCµ' r yXy\ f h( B´ ; =Ä@} yM/ @] ' E ä 7q =@JavaScript ! " ñML Ôä L

## 2. hqİ ! " # \$ % ÿ wr s 45

! " # \$ % Mr st % @ pur s' v @ pur s ÿ w L f ÷ g 7 q ° L

• Ò f h ( ^ e f ! " J @ d Z r s ÿ w ; % « ¥ å b g • u ã L

8 İ • • ! " r s ÿ w ; ò ô Ä a 6 L

- . p 6 İ

¥ > u M ÿ w ?

¥ ` Or s ÿ w ?

¥ ÿ w ; • Ÿ

¥ Æ Í ó Y Ä J ( s

### 2.1. > u M ÿ w — ?

ÿ w ™ ä š M ò å ' v f K ; ÿ w L ø ` @ o - ª æ Q h { ; î ĸ İ

### 2.2. ` Or s ÿ w — ?

Ž ES 5 ª @ / g 6 Í ä İ

^ , \$ , \ b , \ B , (? = p) , (? ! p)

Ò Ó ; R « ¬ Ä % M İ

## 2.2.1. ^ μ \$

^™ž' všrs' Q@Žáërs<sup>a</sup>rsë' QL

\$™çmv7šrsÄR@Žáërs<sup>a</sup>rsëÄRL

ø` | %Ü' vw; ' QμÄRY "#" è©™ÿwRSè©° ' v; ¬šİ

```
var result = "hello".replace(/^[$/g, '#');
console.log(result);
// => "#hello#"
```

áër st %™fgĐ• v mšJ @q=Më; æ• @7N6Gp | %Ö³İ

```
var result = "I\love\nj avascript".replace(/^[$/gm, '#');
console.log(result);
/*
#I#
#love#
#j avascript#
*/
```

## 2.2.2. \b μ \B

\b MEr éM@šî yM \w · \W fK; ÿw@} p6 \w · ^ fK; ÿw@μ \w · \$ fK; ÿwL

ø` ° êÎ ¼& "[JS] Lesson\_01.mp4" <sup>a</sup>; \b@` oİ

```
var result = "[JS] Lesson_01.mp4".replace(/\b/g, '#');
console.log(result);
// => "[#JS#] #Lesson_01#. #mp4#"
```

ö>uM79—?7Gpî í 55L

12@ | %Ä» @\w M' vC [0-9a-zA-Z\_] ; Î ž Ä%@f \w M' %€' „ =oƒE; <sup>a</sup> NONÍ ' vL Ò \W Mš> ' vC [^0-9a-zA-Z\_] ; Î ž Ä%@f \W M \w SI ; NONÍ ' vL

CJ | %RS55 "[#JS#] #Lesson\_01#. #mp4#" <sup>a</sup>; âNÍ ë7 @M• ux; L

¥ h 1 Í @pé' vM "[" · "J"@M \W · \w fK; ÿwL

¥ h 2 Í @pé' vM "S" · "]"@} yM \w · \W fK; ÿwL

¥ h 3 Í @pé' vMz æ· "L"@} yM \W · \w fK; ÿwL

¥ h 4 Í @pé' vM "1" · "."@} yM \w · \W fK; ÿwL

¥ h 5 í @pé' vM ". " · "m"@} yM \W · \wfK; ýwL

¥ h 6 í @ÿZĂR@+p; ' v "4" M \w@f \w · \$ fK; ýwL

Ä» ä \b ; æ• \_@• u \B } yòdÜxyäL

\B yM \b ; Ep; ³ ¬@AEr éMLJ` Ž' vwª hgÿwª @-ì \b@í o; ´ M \B ; L

š î /xyM \w · \w, \W · \W, ^ · \W@\W · \$ fK; ýwL

ø` ‡p; J £@Ühg \B è©° "#"ì

```
var result = "[JS] Lesson_01.mp4".replace(/\\B/g, '#');
console.log(result);
// => "#[J#S]# L#e#s#s#o#n#_#0#1.m#p#4"
```

### 2.2.3. (?=p) μ (?!p)

(?=p)@±ª p MNí £t %@f p +p; ýw@, = /@Ûÿw\_p; ' vpr s pL

ø` (?=l)@#N "l" ' v +p; ýw@J` ì

```
var result = "hello".replace(/(?=l)/g, '#');
console.log(result);
// => "he#l#lo"
```

Ö (?!p) yM (?=p) ; Ep³ ¬@ø` ì

```
var result = "hello".replace(/(?!l)/g, '#');
console.log(result);
// => "#h#el l#o#"
```

q =; e &( KM positive lookahead μ negative lookaheadL

ª î î ÿ ( KM! O2ë‡, μ ð O2ë‡, L

ES5 f\_ ; - 8@E Öx positive lookbehind μ negative lookbehindL

š î M (?<=p) μ (?<!p)L

} g( ‡ Ü78í Þß@î ÿ ° • « @f55ñéμ55ðéL

ANó( ‡ @bg7Üv^ 78=Mí ýwL

ø` (?=p)@Nó´ xy° ì pw¼ox; ' v· p r s@ADXp6 p r s; • Ý' vL



Ö Ž 8 ^ 5 x @ ( ? = p ) y . ^ N 9 Ü x y @ y M p + p ; • Í ÿ w L

## 2.3. ÿ w ; • ÿ

d Z ÿ w ; x y @ | % R S x y ° z ' v "" L

ø ` "hello" ' v w e « Z ` o ; Ä % İ

```
"hello" == "" + "h" + "" + "e" + "" + "l" + "" + "l" + "o" + "";
```

} e « Z İ

```
"hello" == "" + "" + "hello"
```

x C @ Ü / ^ ^ h e l l o \$ / ž ° / ^ ^ h e l l o \$ \$ \$ / @ M b g N O . 1 ; İ

```
var result = /^hello$$$$/.test("hello");
console.log(result);
// => true
```

Uª RS ž ° É © j ; :

```
var result = /(?!he)^he(?:\w)llo$\b\b$/i.test("hello");
console.log(result);
// => true
```

} y M / ' v f K ; ÿ w @ R S ž ° á Í L

TIP Ü ÿ w x y z ' v @ M d ÿ w A B g P ; x y ¿ % L

## 2.4. ò ô Đ J

### 2.4.1. Dr s NOPß ; ! "

• ' ž Í ! " Dr s NOPß

easy @ / . ^ / L

x ö C ! " p w t g N Í ' v @ A Ů ' v \_ p M ' Q @ Ò 7 9 ; ' v w M D : Ž ; L

## 2.4.2 € ' ; • ÿ ( , v # N\$

ø ` Ü "12345678"@ ' ° "12,345,678"L

R ´ MGpÜòó; ÿwè©° ", "L

¬ÑM&gt;u—?

## 2.4.2.1. ô à ü \_ Ní õ 7

ÿY (?=\d{3}\$) yRS— 6l

```
var result = "12345678".replace(/(?=\d{3}$)/g, ',');
console.log(result);
// => "12345,678"
```

±ª @(?=\d{3}\$) rs \d{3}\$ +p; ÿwLÒ \d{3}\$ rs; M, \*' vwü\_• 3 ÿ€' L

## 2.4.2.2. ô à hg; õ 7

xöõ7àÊ; ÿw@pw\_p 3 í €' NC@} yM \d{3}ª ~àÊNi L

CJRSÿY' r +l

```
var result = "12345678".replace(/(?=(\d{3})+)$/g, ',');
console.log(result);
// => "12,345,678"
```

## 2.4.2.3. r s ±² ÐJ

ž ^! " \_@páFöÆí ÐJ @CJ | %E, Ê·¹l

```
var result = "123456789".replace(/(?=(\d{3})+)$/g, ',');
console.log(result);
// => ",123,456,789"
```

xö±p; ! " @JJ#NÜ...ÄRO+€@NAM3; ÷€@yÜ±+p; ÿwè©° õ7LxC⁻EàÊ7í·¹L

• uy\—? | %pwr s; 67í ÿwDXM' QL

| %Ä»rs' QRSÿY ^@Apw7í ÿwDM' Q•u' ?

easy@(?!\^&gt;@' €6ä-?•€`oİ

```
var regex = /(?!^)(?=(\d{3})+$/g;

var result = "12345678".replace(regex, ',');
console.log(result);
// => "12,345,678"

result = "123456789".replace(regex, ',');
console.log(result);
// => "123,456,789"
```

#### 2.4.2.4. Ö×±ÜÄ%

`a p Ü "12345678 123456789" è © ° "12,345,678 123,456,789"L

CJ | %GpĐÑ! " @ÜË p; ' Q ^ μÃR \$@ĐÑ° \b|

```
var string = "12345678 123456789",
    regex = /(?!\\b)(?=(\\d{3})+\\b)/g;

var result = string.replace(regex, ',');
console.log(result);
// => "12,345,678 123,456,789"
```

±ª (?!\\b) • u x y —?

p w] + MNÍ ÿ w@ADM \\b + p; ÿ w@±Ä (?!\\b) /; y M \\BL

x Cü d! " ° ä | /\B(?=(\\d{3})+\\b)/gL

R« ¬Ä%M|

#### 2.4.2.5. œ%¬

• ( v # N\$ NÍ B ´ ; ó Y y Mø ù œ%¬L

ø` Üop; ' v w|

1888

œ%¬ ° Ĩ

\$ 1888.00

gä +p; úû@| %7. ÄÊ` oĭ

```
function format (num) {
  Ê   return num.toFixed(2).replace(/\B(?=(\d{3})+\b)/, ",").replace(/^\/, "$$ ");
};
console.log( format(1888) );
// => "$ 1,888.00"
```

### 2.4.3. F Ö Ü S . ¹

üsøå 6-12 ý@¬ €' , Šž' vµfž' %C° @A\$ýª ~p6 2 Å' vL

C¹ @` až° áÍ! " xp‡@øù. ®LApž° NÍ! " yøùÿPL

• u@| %yx! ÁNoL55| %dÿw; xyM" K#L

#### 2.4.3.1. Î ¬

D° ±ÒA\$ýª ~p6 2 Å' vÓ7Nç¼L | %RS. ®ž àĭ

```
var regex = /^[0-9A-Za-z]{6,12}$/;
```

#### 2.4.3.2. p‡M" pÿgŠNÅ' v

\$æ@pw; \$ýpÿ€' @• u' ?CJ | %RSÿY (?=.\*[0-9]) x – L

xC! " · ° Ĩ

```
var regex = /(?!.*[0-9])^[0-9A-Za-z]{6,12}$/;
```

#### 2.4.3.3. ýJpÿšî pÅ' v

ø` ýJpÿ€' µŠž' %®RSY (?=.[0-9])(?=.[a-z]) x – L

xC! " · ° Ĩ

```
var regex = /(?!.*[0-9])(?!.*[a-z])^[0-9A-Za-z]{6,12}$/;
```

## 2.4.3.4. y %

| %RSÜE¹ ¨ ° oUÆÅ=&gt;fNÌ

¥ ýJpŸ€' μŠž' %

¥ ýJpŸ€' μfž' %

¥ ýJpŸŠž' %μfž' %

¥ ýJpŸ€' , Šž' %μfž' %

¥ S‡; 4 Å=&gt;Mₛ; ôÁ™Ä&amp;‡@RSDYh 4 çšL

ü d%ÐMÌ

```
var regex = /((?=[0-9])(?=[a-z])|(?=[0-9])(?=[A-Z])|(?=[a-z])(?=[A-Z]))^[0-9A-Za-z]{6,12}$/;
console.log( regex.test("1234567") ); // false é M€'
console.log( regex.test("abcdef") ); // false é MŠž' %
console.log( regex.test("ABCDEFGH") ); // false é Mfž' %
console.log( regex.test("ab23C") ); // false D‡6ÿ
console.log( regex.test("ABCDEF234") ); // true fž' %μ€'
console.log( regex.test("abcdEF234") ); // true V=´g
```

R« ¬Ä%MÌ

## 2.4.3.5. y '

‡p; ! " 5oxøù@j @t pxyähq( @±²yéhxyäL

/(?=[0-9])^[0-9A-Za-z]{6,12}\$/

dZ7Í ! " @| %t GpôOÚ (?=[0-9])^ fRL

( ' x5yM (?=. \*[0-9]) μ ^L

#N' Q+p±gÍ ŷw™] • } M' Q@fýNÍ ŷw@€€f+; z' v; øšL

(?=. \*[0-9]) #NÛŷw\_p; ' v r s .\*[0-9]@f@gNOáÍ N³ ' v@\_pÌ 8Í €' L

î ï ° fÚ° @yM¼ox; ' v@\$ýpŸÍ €' L

#### 2.4.3.6. HI NÃy S

Öª ~pŸpÃ' vÓ; ³ ¬yM/@DXéh´ M€' @} DXéh´ MŠž' %\_@} DXéh´ Mfž  
' %\_L

• upwÖDXéh´ M€' Ó@• u—? (?!p) à) ¬

dó; ! " MÌ

```
var regex = /(?!^[0-9]{6,12}$)^[0-9A-Za-z]{6,12}$/;
```

VÃÖ´ DXÓ—?

ü d%ÐMÌ

```
var regex = /(?!^[0-9]{6,12}$)(?!^[a-z]{6,12}$)(?!^[A-Z]{6,12}$)^[0-9A-Za-z]{6,12}$/;
console.log( regex.test("1234567") ); // false é M€'
console.log( regex.test("abcdef") ); // false é MŠž' %_
console.log( regex.test("ABCDEFGH") ); // false é Mfž' %_
console.log( regex.test("ab23C") ); // false D‡6ÿ
console.log( regex.test("ABCDEF234") ); // true fž' %_μ€'
console.log( regex.test("abcdEF234") ); // true V=´ g
```

± R« ¬Ä%MÌ

## 2.5. 8İ ŠÃ

%6òór syw; 7 6 Í ä@â | %; y\! " . ¹™š\* - ÖéäÊ™šL

### 3. hVİ ! " # \$ % 67; ~ Y

DÃ+Ô| , ª ´ g67L! " # \$ % } MNÔ| , @Ò67; : ŽŸ7Ô| , ÉövfL

d67; ŸYM" c' ó, @M&' d! " ; òó( Ô; NÍ ) p\* +L

67; ~ Y@±ÄV, p| yX/OÚ@67ñ- ä( C@UZ | %DY< L

DYŠÍ ( C@EgpÅ=Äl Ž JavaScript ĚDY< @Ž! " # \$ % ĚDY< L

8İ - . - òdÎ E@A| } pžø6L

- . p6l

¥ ( Cµ( ÖÃ

¥ ( CDY

¥ EODY

¥ AAµ67

¥ òôĐJ

#### 3.1. ( Cµ( ÖÃ

7q=M67ü» b; ~ Y@} Mü£a; . X@v^ 67- ; ! " MNÍ 1î @fñ- £# \$ % L

##### 3.1.1. ( C

| %Ä» /a+/ rsRÈàÊ; "a"@ÒprsRÈàÊ; "ab" J @GpŸY /(ab)+/L

±ª 67Mñ- ( C. X@Ÿ' r + ~ YZ "ab" 7Í 1î @• €` o|

```
var regex = /(ab)+/g;
var string = "ababa abbb ababab";
console.log( string.match(regex) );
// => ["abab", "ab", "ababab"]
```

##### 3.1.2. ( ÖÃ

ÒŽáÁ( ÖÃ (p1|p2) ª @C/ 67; ~ Y} MD, ÒO; @ñ- ä( Ö# \$ %; hgRXL

ø` @prs` o; ' vw|

I love JavaScript  
I love Regular Expression

RSŸY! " `

```
var regex = /^I love (JavaScript|Regular Expression)$/;
console.log( regex.test("I love JavaScript") );
console.log( regex.test("I love Regular Expression") );
// => true
// => true
```

` aî ì ! " ª ; 67@f`

/^I love JavaScript|Regular Expression\$/@

r s' v wM "I love JavaScript" μ "Regular Expression"@] • 7DM| %€p; L

## 3.2. ( CDY

7M67NÍ %p; ~ Y@gä< @| %yRSêë€BñØ@S Évf; è©Ð~ L

ÖpŸY< ] x; Ü/\$ýs ÃŸYÄÊ• 1; APIL

SÎ Í ÖJ L \$æœ%M yyyy-mm-dd ; @| %RS 2ž NÍ Î E; ! " `

```
var regex = /\d{4}-\d{2}-\d{2}/;
```

± R« ¬ Ä%MÎ

• \_î ÐÑ° 67- ; `

```
var regex = /(\d{4})-(\d{2})-(\d{2})/;
```

± R« ¬ Ä%MÎ



dø7pÍ R« ¬ - ®@| %, Ê@· +=òø@\_ =áä ( C• 7@` Group #1L

±À! " D™} M7u-; @Žr s¾¥ª @ââNÍ ( C´ ' 2NÍ zK@Yx: 3âNÍ ( Cr s6;  
€BL

4• ( CRSAµ€B@• u| %yRSŸY< %L

### 3.2.1. ñØ€B

ø` ñØàÎ , Ĩ , ĩ @RS7u-ĭ

```
var regex = /(\d{4})-(\d{2})-(\d{2})/;
var string = "2017-06-12";
console.log( string.match(regex) );
// => ["2017-06-12", "2017", "06", "12", index: 0, input: "2017-06-12"]
```

NOTE match 59; NÍ €C@hNÍ m6M1î r sÃa@• \_MÓÍ ( C™67Ëšr s;  
- . @• \_Mr s o\* @ü \_M7L; Î 8LHI @! " # \$ % M" gĐ• v g@match  
59; €Cœ%MDN9; L

HI } RSŸY! " ÂJ do; exec ¿ Šĭ

```
var regex = /(\d{4})-(\d{2})-(\d{2})/;
var string = "2017-06-12";
console.log( regex.exec(string) );
// => ["2017-06-12", "2017", "06", "12", index: 0, input: "2017-06-12"]
```

ýJ @} RSŸY 89€; é, : Ÿ \$1ª \$9 xµØĭ

```

var regex = /(\d{4})-(\d{2})-(\d{2})/;
var string = "2017-06-12";

regex.test(string); // ! " Ð~ fR@J `
//regex.exec(string);
//string.match(regex);

console.log(RegExp.$1); // "2017"
console.log(RegExp.$2); // "06"
console.log(RegExp.$3); // "12"

```

### 3.2.2. è ©

ø` @€Ü yyyy-mm-dd œ%@è ©° mm/dd/yyyy • u- ?

```

var regex = /(\d{4})-(\d{2})-(\d{2})/;
var string = "2017-06-12";
var result = string.replace(regex, "$2/$3/$1");
console.log(result);
// => "06/12/2017"

```

±<sup>a</sup> replace<sup>a</sup>; @hql Ē€ĒY \$1, \$2, \$3 { Ēðó; ( CLe« Z` o; Ä%l

```

var regex = /(\d{4})-(\d{2})-(\d{2})/;
var string = "2017-06-12";
var result = string.replace(regex, function () {
    return RegExp.$2 + "/" + RegExp.$3 + "/" + RegExp.$1;
});
console.log(result);
// => "06/12/2017"

```

} e« Zl

```

var regex = /(\d{4})-(\d{2})-(\d{2})/;
var string = "2017-06-12";
var result = string.replace(regex, function (match, year, month, day) {
    return month + "/" + day + "/" + year;
});
console.log(result);
// => "06/12/2017"

```

### 3.3. EODY

> äŸYòó API xDY( C@} RSŽ! " 8cĚDY( CLAt XDYf+àÊ; ( C@fEODYL  
±MSİ í öJL

ø` þžNÍ! " Öxrs` oVÅæ%ì

```
2016-06-12
2016/06/12
2016.06.12
```

ü2RX€6; ! " M:

```
var regex = /\d{4}(-|\/|\.)\d{2}(-|\/|\.)\d{2}/;
var string1 = "2017-06-12";
var string2 = "2017/06/12";
var string3 = "2017.06.12";
var string4 = "2016-06/12";
console.log( regex.test(string1) ); // true
console.log( regex.test(string2) ); // true
console.log( regex.test(string3) ); // true
console.log( regex.test(string4) ); // true
```

±ª / μ . Gp¨ vLˉ • rsäþw; =>@A} rs "2016-06/12" 79; €BL

\$æ| %€þw( ; v+\_N<•u' ?CJGpŸYEODYì

```
var regex = /\d{4}(-|\/|\.)\d{2}\1\d{2}/;
var string1 = "2017-06-12";
var string2 = "2017/06/12";
var string3 = "2017.06.12";
var string4 = "2016-06/12";
console.log( regex.test(string1) ); // true
console.log( regex.test(string2) ); // true
console.log( regex.test(string3) ); // true
console.log( regex.test(string4) ); // false
```

±R« ¬Ä%Mì

õ³Ëp; \1@#N; DYf+; •Í ( C (-|V|\\.)LDÂ<rs6>u™ø`-š@\\1´rs•Íý  
9; šîŠÍ'vL

| %Ä»ä \\1; ÿv\_@•u \\2µ \\3; æ•}yxyä@f( K{ ÈhqÍµhVÍ ( CL

567Ë@CJ@=' ' EgÆÍ·¹L

### 3.3.1. 67>?•u'?

Sò67™' 67šö+Lø`l

```
var regex = /^(\\d)(\\d(\\d))\\1\\2\\3\\4$/;
var string = "1231231233";
console.log( regex.test(string) ); // true
console.log( RegExp.$1 ); // 123
console.log( RegExp.$2 ); // 1
console.log( RegExp.$3 ); // 23
console.log( RegExp.$4 ); // 3
```

| %RS557Í! "rst%l

¥ hNÍ'vM€' @ø` / "1"@

¥ hqÍ'vM€' @ø` / "2"@

¥ hVÍ'vM€' @ø` / "3"@

¥ ¼ox; M \\1@MhNÍ ( C- . @•u5hNÍ' 67dó; ( CM>u@M "123"@

¥ ¼ox; M \\2@...6h2Í' 67@dó; ( C@rs; - . M "1"@

¥ ¼ox; M \\3@...6h3Í' 67@dó; ( C@rs; - . M "23"@

¥ ü\_ ; M \\4@...6h3Í' 67@dó; ( C@rs; - . M "3"L

C! " ; R« ¬Ä%Ml

### 3.3.2. \10 # N > u — ?

HI NÍ ¶ · RXM@f \10 M# Nh 10 Í ( C@±M \1 µ 0 — ?

%DM+ = @¯ • NÍ ! " È à Ê \10 ø ù @´ L • € ` o Ì

```
var regex = /(1)(2)(3)(4)(5)(6)(7)(8)(9)(#) \10+;/;
var string = "123456789# #####";
console.log( regex.test(string) );
// => true
```

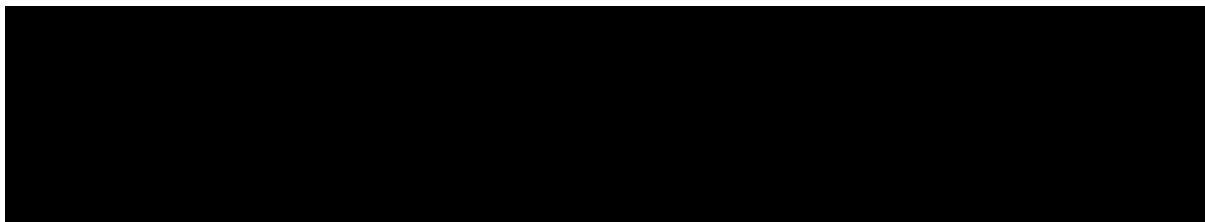
TIP     ` a { p r s \1 µ 0 ; ° @ f Ÿ Y (?:\1)0 \_ = \1(?:0)L

### 3.3.3. DYD: Ž ; ( CE • 9 ?

x ö EODY@MDY+p; ( C@A | %Ž ! " È DY ä D: Ž ; ( CJ @CJ ! " DEAB@t Mr s  
EODY; ' v 8c LJ ` \2@yrs "\2"L õ³ "\2" #Nd "2" ê ë ä ¨ vL

```
var regex = /\1\2\3\4\5\6\7\8\9/;
console.log( regex.test("\1\2\3\4\5\6\7\8\9") );
console.log( "\1\2\3\4\5\6\7\8\9".split("") );
```

Chrome CD" [ n; Æ a Ì



### 3.3.4. ( C\_pg' r E • 9 ?

( C\_pg' r ; ° @( Cü dA µ 6; € BMü \_Ni ; r s L ø ` ` o ; • € DJ Ì

```
var regex = /(\d)+/;
var string = "12345";
console.log( string.match(regex) );
// => ["12345", "5", index: 0, input: "12345"]
```

...‡ p 5 à @ ( C ( \d ) A μ ; € B M " 5 " L

ý x d Z E O D Y @ } M 7 9 ; L • € ` o ĩ

```
var regex = /(\d)+ \1/;
console.log( regex.test("12345 1") );
// => false
console.log( regex.test("12345 5") );
// => true
```

### 3.4. A A μ 6 7

f + Î ª à Ê ; 6 7 @ ´ E A μ < % r s 6 ; € B @ S U \_ Ê D Y @ x C } / < % M A μ P ( C μ A μ P ( Ö L

` a t € p 6 7 ü £ a ; . X @ A D E D Y < @ f @ 4 D Ž A P I Ê D Y @ } D Ž ! " Ê E O D Y L C J R S Ÿ Y A A μ 6 7 ( ? : p ) μ ( ? : p 1 | p 2 | p 3 ) @ J ` 8 Ĩ h N Í J £ R S Ð Ñ ö ĩ

```
var regex = /(?:ab)+/g;
var string = "ababa abbb ababab";
console.log( string.match(regex) );
// => ["abab", "ab", "ababab"]
```

ý x @ h q J £ R S Ð Ñ ö ĩ

```
var regex = /^I love (?:JavaScript|Regular Expression)$/;
console.log( regex.test("I love JavaScript") );
console.log( regex.test("I love Regular Expression") );
// => true
// => true
```

### 3.5. ò ô Ð J

ª C 6 7 ; ~ Y E Û • ^ ä @ Ã Ñ q ° @ y M ñ - ä R - | % Ÿ Y ; ( C @ ` O Y y 5 | % ; ä L

### 3.5.1. ' vw trim ğ Š t F

trim ğ Š Mî î ' vw; ' QµÃR; z ÚvLgpÅ¬Ñî – L

hNÅ@r s 6' QµÃR; z Úv@• \_è©° z' vL` ĩ

```
function trim(str) {
  Ė return str.replace(/^\s+|\s+$/g, '');
}
console.log( trim("  foobar  ") );
// => "foobar"
```

hqÅ@r s 1 Í ' vw@• \_YDYx ñØà òó; €Bİ

```
function trim (str) {
  Ė return str.replace(/^\s*(.?)\s*$/g, "$1");
}
console.log( trim("  foobar  ") );
// => "foobar"
```

7ĖŸYä , Ÿr s \*?@D• } Er s ü \_NÍ z œf +; hg z œ; L

] • @+ = Þ ß ã L

### 3.5.2. Œâ Í Er ; 1' %¨ ©ÖfŽ

```
function titleize (str) {
  Ė return str.toLowerCase().replace(/(?:^|\s)\w/g, function (c) {
  Ė return c.toUpperCase();
  Ė });
}
console.log( titleize('my name is epeli') );
// => "My Name Is Epeli"
```

¬ÑM...6â Í Er ; 1' %¨@] • 7ĖDŸYAAµr s } MRS; L

### 3.5.3. GŒ¬

```
function camelize (str) {
  Ė return str.replace(/[-_\s]+(?:\w)?/g, function (match, c) {
  Ė return c ? c.toUpperCase() : '';
  Ė });
}
console.log( camelize('-moz-transform') );
// => "MozTransform"
```

±ª ( C (.) #N1' %L E r ; M• M@+p; ' vRSMáÍ R' v, o¢£\$ zÚvL! " \_p  
; ? ; , ; @Möäó d str Rh; ' vRXDMEr' v@ø` str M '-moz-transform' L

### 3.5.4. ª ¢ £ ¬

```
function dasherize (str) {
  return str.replace(/([A-Z])/g, '-$1').replace(/[_\s]+/g, '-').toLowerCase();
}
console.log( dasherize('MozTransform') );
// => "-moz-transform"
```

G£¬; H¾¥L

### 3.5.5. HTML " vµE" v

```
// ¢HTML• " ' v" ©° eQ; Åî
function escapeHTML (str) {
  var escapeChars = {
    '<' : '<',
    '>' : '>',
    '"' : '"',
    '&' : '&',
    '\\' : '\\',
  };
  return str.replace(new RegExp('[' + Object.keys(escapeChars).join('') + ']', 'g'),
    function (match) {
      return '&' + escapeChars[match] + ';';
    });
}
console.log( escapeHTML('<div>Blah blah blah</div>') );
// => "&l t;div&gt;Blah blah blah&l t;/div&gt;"
```

±ª ŸYäY 89€%° ; ! " @• \_è ©òó; æ%yëä@7Í 88İ báƒôÁL

I M< ; H¾¥@ŸYä67@SUñ- DY@} 7Î E@` oİ



```
// Äî ' v'' ©öeQ; HTMLL
function unescapeHTML (str) {
  var htmlEntities = {
    nbsp: ' ',
    lt: '<',
    gt: '>',
    quot: '"',
    amp: '&',
    apos: '\''
  };
  return str.replace(/&([^\s;]+);/g, function (match, key) {
    if (key in htmlEntities) {
      return htmlEntities[key];
    }
    return match;
  });
}
console.log( unescapeHTML('&lt;div&gt;Blah blah blah&lt;/div&gt;') );
// => "<div>Blah blah blah</div>"
```

½¾ key µØòó; ( CDY@• \_~ ödo; J L

### 3.5.6. r s ° d \* K

pwr s l

```
<title>regular expression</title>
<p>laoyao bye bye</p>
```

Dr s l

```
<title>wrong!</p>
```

r s Ní ' \* K@RSÿY! " <[>]+>@

r s Ní L \* K@RSÿY <V[>]+>@

AMPwr s ° d \* K@• yGpÿYEODY@` l

```

var regex = /<([>]+)>[\d\D]*<\/\1>/;
var string1 = "<title>regular expression</title>";
var string2 = "<p>laoyao bye bye</p>";
var string3 = "<title>wrong!</p>";
console.log( regex.test(string1) ); // true
console.log( regex.test(string2) ); // true
console.log( regex.test(string3) ); // false

```

±ª', \*K <[^\>]+\> Ñ° <([^\>]+\>@ÿY67; , ; Möä\_pÿYEODY@  
 Òñ- ( CLL \* KÿYäEODY@<\/\1>L

HI @[\d\D]; ³¬M@7Í ' vM€' ‚ =DM€' @xC@} yMr sN³ ' v; ³¬L

## 3.6 8İ ŠÃ

%6xy67RSñ- ( C@| %RSñØ€B@óÛyRSäL

## 4. h8İ ! " # \$ % 9: § £ x

ef ! " # \$ % @ M G p Š 6 M r s £ x ; L

Ö der s £ x J @ g p Í ' à Ê ; N ß ø ù ã ĺ Ò 9: Ó L

O o x P ā f ‡ @ ½ Ä ‡ Q M N Í ø ù . ® x y ; œ • L

x C @ 8 İ y Î E R p î / ... † 9: 6 ‰ M > u Þ ß L

- . p 6 ĺ

¥ bg 9: ; r s

¥ g 9: ; r s

¥ B ´ ; 9: Ä %

### 4.1. bg 9: ; r s

\$ æ | % ; ! " M / ab { 1 , 3 } c / @ ± R « ¬ Ä % M ĺ

Ò ] , \* ' v w M " abbbc " J @ y b g h { ; Ò 9: Ó L ± r s ¾ ¥ M ĺ

±<sup>a</sup> £ # \$ % **b{1,3}** # N **"b"** ' v R È à Ê 1 6 3 i L

## 4.2. g9: ; r s

` a , \* ' v w M **"abbc"** @<sup>a</sup> K y g 9: L

-<sup>a</sup> h 5 ( g S È É @ # N r s D ° . L C J **b{1,3}** E Û r s 6 ä 2 Í ' v **"b"** @ + Ò À € h V Í J @  
Ã a , Ê ¼ o x ; ' v M **"c"** L • u y • ö **b{1,3}** y E Û r s ^ [ L • \_ T U Ú 9 6 f + ; T U <sup>TM</sup> f  
h 6 ( · h 4 ( N 9 š @ ü \_ Ì Y £ # \$ % **c** @ ì r s ' v **"c"** L ] • @ C J 1 Í # \$ % r s ° . ä L

-<sup>a</sup> ; h 6 ( @ y M Ò 9: Ó L

' R X d C b g 3 b @ 7 È | % Ì V N Í J £ L ! " M Ì

, \* ' v w M **"abbbc"** @ r s ¾ ¥ M Ì

±<sup>a</sup> h 7 ( μ h 10 ( M9: L h 7 ( · h 4 ( N9@CJ b{1,3} r s ä p Í " b "@ Ò h 10 ( ·  
h 3 ( N9@CJ b{1,3} t r s ä N Í " b "@ 7 } M b{1,3} ; ü d r s Ã a L  
7 È Ì 5 N Í ... © ; 9 : @ ! " M Ì

, \* ' v w M Ì "abc"de@r s ¾ ¥ M Ì

- ª ´ 5 ä Å € r s Û D 7 W X ; ¾ ¥ L R S 5 à . \* M A B Y Z Þ ß ; L

ö ä [ ~ N Ý D \$ p ; 9 : @ R S Ü ! " ð Ñ ö / "[^"]\*" / L

### 4.3. B ´ ; 9 : Ä %

! " # \$ % r s ' v w ; 7 Å ¿ % @ g Í e & @ Ž 9 : § L

9: § } / € \ \$ @ < ; » 8 ¬ € M ĩ ... 1 ; Š N Å T U ™ Û a T U š à , @ ] ^ ... 7 Å T U à ,  
 h X \$ 6 ; h g Ò T U Ó @ ] N ç Ñ † 6 Ò ¹ Q Ó ; J ¾ ™ D X Ĭ + ê š @ Ĭ \_ \_ N ( , ` a ( @ ...  
 H N Å R X Ò T U Ó à , @ Û È ] ^ @ » 6 h g ; Ò Ñ Ò Ó ™ T U š ´ € \ ¾ L 7 Å D ‡ Ò + ê Ó ,  
 D ‡ Ò 9 : Ó b ... y ; ¿ § @ y / ~ Ò 9 : § Ó L

Ñ ä â ä c

8 d ‡ y M K å â 2 ] ^ ñ § L ± ª \_ 6 f + ; Š N ( 7 N ¾ ¥ @ | % / ö Ò 9 : Ó L ... ‡ p ; n e ¾ ¥ ª  
 @ R S 5 à @ Ñ † D ½ J @ y E , % Ò 9 : Ó L f @ Å € r s W X J @ ¼ o x ; N ( ½ B y M 9 : L

» x @ | % M Š ä L • u JavaScript ª ! " # \$ % E f % 9 : ; î ¿ ´ g + Ý — ?

#### 4.3.1 µ ¶ ' r

f + ; J E ´ M µ ¶ ' r ò ô ; L ø ` b { 1 , 3 } @ x ö ± M µ ¶ ; @ Å € R X ; ] \$ M ... á ¿ ~ ; ¿ O ĩ Å  
 € L 1 2 E Å € " b b b " @ • \_ Ĭ 5 1 Í ! " M " X r s L D X r s J @ g à N Í " b " @ f Ž " b b " ; » ¼  
 ‡ @ Ĭ Ü È Å € L ` a ± D è @ Ĭ g à N Í @ Ĭ € L ` a ± D è — ? t X / O r s W X ä L

´ • , h r s M µ ¶ ; @ A } p † ‡ 1 î X ! u r s L " " @ h f D : @ i Æ j k ?

C J | % D ĩ E • @ ` a ] á Í µ ¶ ' r m ^ : Ž @ ð ò n g o p J @ C J E M • 9 ?

% ð M @ 2 o , ö v ¬ x ö K å â 2 ] ^ L • € ` o Ĭ

```
var string = "12345";
var regex = /(\d{1,3})(\d{1,3})/;
console.log( string.match(regex) );
// => ["12345", "123", "45", index: 0, input: "12345"]
```

± ª @ + p ; \d { 1 , 3 } r s ; M " 1 2 3 " @ \_ p ; \d { 1 , 3 } r s ; M " 4 5 " L

#### 4.3.2 , ÿ ' r

, ÿ ' r y M Ž µ ¶ ' r \_ p é Í · 7 L # N ¹ R X ~ ; r s @ ø ` Ĭ

```
var string = "12345";
var regex = /(\d{1,3}?)(\d{1,3})/;
console.log( string.match(regex) );
// => ["1234", "1", "234", index: 0, input: "12345"]
```

± ª \d { 1 , 3 } ? t r s 6 N Í ' v " 1 " @ Ò \_ p ; \d { 1 , 3 } r s ä " 2 3 4 " L

´ • , ÿ ' r D µ @ A } E g 9 : ; Ê o L ø ` ! " M Ĭ

, \* ' v w M " 12345 " @ r s ¾ ¥ M Ĩ

Ä » ' D µ , 7 Ä ‡ @ A M ö ä 1 î r s ° @ b ' § @ } t X â ' á q 6 ä L x C ü \_ \ d { 1 , 3 } ? r s ; ' v M " 12 " @ M p Í € ' @ Ò D M N Í L

### 4.3.3 ( Ö Ã

| % Ä » ( Ö } M , ÿ ; @ ø ` / c a n | c a n d y / @ i r s ' v w " c a n d y " @ c 6 ; Ã a M " c a n " @ x ö ( Ö E N Í N Í À € @ ` a + p ; † ‡ ä @ \_ p y D E Ĩ € F ä L

( Ö Ã @ R X + p ; £ t % E Ä ° ä , h r s @ ` a ¼ o x # \$ % 1 î D r s J @ r E Ü È À € í o ; ( Ö L 7 Å À € } R S 5 ° N Å 9 : L

ø ` ! " Ĩ



, \* ' v w M "candy"@r s ¾ ¥ |

‡ p h 5 ( @ ¯ • b g 9 6 f + ; T U @ A r • 9 6 ä ( Ö Ã @ À € o N Å R X L h S @ R S • ö < M  
N Å 9 : ; L

---

#### 4.4. 8 ĩ Š Ã

± Å 9 : § @ 7 . ® ò ó ; L

Î E Ã Æ y M @ ! x ö g á Å R X @ h S p N Í N Í € L » 6 @ p u 6 Š N ( J @ 1 î r s ° . ä s p u ü  
\_ ´ € ^ \_ @ , Ê 1 î r s D ° . L

---

¥ µ ¶ ' r Ò € Ó ; t 5 M l u v Œ w « L « x n ã ä @ U y 6 @ D ë @ l U y 6 L

¥ ‚ Ÿ ' r Ò € Ó ; t 5 M l z Þ ß é « L â ~ ä @ l á â 6 ë D @ ± g 6 ~ { @ l â 6 L

¥ ( Ö Ã Ò € Ó ; t 5 M l ø ø V · L 7 · D ë @ © N · c @ ± D ë @ l © L

4 • g 9 : ; ¾ ¥ @ • u r s Þ ß " • à N Ý L ò d | — ? ò d • Ý D F A D <sup>TM</sup> , D F A M Ò u • P g } • ~  
• Ó ; Î Ž L

Ò JavaScript ; ! " D <sup>TM</sup> M N F A @ N F A M Ò A u • P g } • ~ • Ó ; Î Ž L

*f* h ( | , <sup>a</sup> ; ! " ´ M N F A @ ö € < 7 u • ë — ?

% l ' K 5 | r s , @ A M | • ï V { @ Ò \ | ± g # *f* L

## 5. h; ĩ ! " # \$ % ; < (

dZNÔ| , ; òó¥å•u9@RSgpÍ @åx&' ĩ <μžL

DJpw• ' Xy\• ¹ @±p5ŠK^ ; y\¿ĐLĚsM79@! " # \$ % } M79L

! " 7Ô| , 8±Ú| , gN6Dý@< ½ByMNf„ ' v@Òbgh{ Ò| qÓ; æ• L

`OX! uî ÜNfw! " <( ° Ni Ni ; @° öä...yÒk( Ó; ôJL

8İ yy\7N• ¹ @- . p6İ

¥ Ã μĐ~ v

¥ õ³ p6

¥ ĐJ( s

### 5.1. Ã μĐ~ v

• ¥| , Nó´ gĐ~ vLtpgĐ~ v@yEàÊNÍ• ¹ L] Nf„ Đ~ ŽNoJ @2Đ~ | @Ú\_Đ  
~ | —? öäDf%†v@yGp| , 8c•vÜĐ~ ] \$@fh{ ; â2‡L

ÒŽ! " # \$ %ª @Đ~ v´ î ÊŽÃª @f~ • " ' vμ^ ½' vhĚ#; NÍ Í • " 1î L

JavaScript ! " # \$ %ª @´ g+ÝÃ —?

' v' p' , ' vC, ' r, ä, ( C, Á%( Ö, EODYL

šî Ÿvî p9Š` ol

Ã	/O
' p'	rsNÍ šî ' v@p6DY¨ v; μGp¨ v; Lø` a rs' v "a"@ Úø` \n rs@ëv@Úø` \. rsŠ€6L
' vC	rsNÍ ' v@RSMáÅRXfN@ø` [0-9]@#NrsNÍ €' L } g \d ; Î ž Ä%L Hl ±gEv' vC@#NRSM> ä••' vfi NONÍ ' v@ø` [^0-9]@ #NNÍ A€' ' v@} g \D ; Î ž Ä%L
' r	#NNÍ ' vRĚàÊ@ø` a{1,3} #N "a" ' vRĚàÊ 3 i L Hl ±gB´ ; Î ž Ä%@ø` a+ #N "a" ' vRĚàÊª ~Ni L
ä	rsNÍ Ÿw@ÖDM' vLø` ^ rs' vw; ' Q@Úø` \b rsEréM@ Úø` (?=\d) #N€' +p; ŸwL
( C	Y67#NNÍ 1î @ø` (ab)+@#N "ab" pÍ ' vRĚàÊái @ } RSŸYAAμ( C (?:ab)+L
( Ö	áÍ £# \$ %áÁN@ø` abc bcd@# \$ %rs "abc" „ = "bcd" ' v£wL EODY@ø` \2@#NDYh 2 Í ( CL

±ª á 6; Đ~ vgl

Đ̃ vne	Đ̃ v	â 2‡
˘ vv	\	1
67μ¿67	(É), (?·É), (?=É), (?!É), [É]	2
' r } • v	{m}, {m,n}, {m,}, ?, *, +	3
ÿwμ\$U	^, \$, \m' v, Nó' v	4
Â» v™< ĄŠ		5

‡pĐ̃ v; â 2‡...‡ª o@˘ ā 6àL

7Ě@| %x( sNÍ ! " Ĩ

/ab?(c|de\*)+|fg/

¥ ¯ Z67; : Ž@hS@(c|de\*) MNÍ 1î Ã L

¥ Ž (c|de\*)ª @õ³ ±ª; ' r @xC e MNÍ 1î Ã L

¥ Úxö( ÖÃ | â 2‡üà@xC c MNÍ 1î , Ò de\* MHNÍ 1î L

¥ ýx@1Í ! " ( ° ä a, b?, (É)+, f, gLÒ˘ Z( Ö; £x@

ÚRS( ° ab?(c|de\*)+ μ fg 7ph( L

ûü' b• | ¿ Ž@‡p; ( sRY±R« ¬Ä%ne` oĭ

## 5.2. õ³ p6

ôZÃ μĐ̃ v@±MgÆ6Gpv^ĭ

### 5.2.1 r s' vw1î . ¹

xöMpr s1Í ' vw@| %ÛBEŽ! " +\_ª é‡ä ^ μ \$L

ø` pr s, \*' vw "abc" , = "bcd" J@` aNDŠ' @yEž ° /^abc|bcd\$/L

Öÿw' vµ' v\$Uâ2‡pø< Æã@• ±rs; Ã Ml

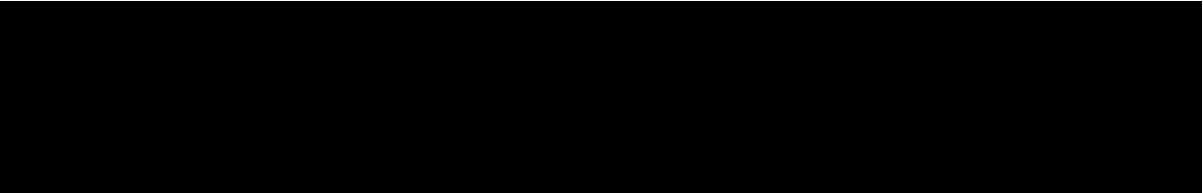
óÛÐÑ° :

5.2.2 ' r R• . 1

\$æ@pr s79; ' vwł

- 1. â í ' v ö "a, "b", "c" NÁ±N@
- 2. ' vw; øåM 3 ; ÷€L

CJ! " DX€] • î ž ° /^[abc]{3}+\$/@79EAB@/ + +pb>uR%©; ĺ



CJ pÐÑ° ĺ

## 5.2.3 m' v " v . 1

h{ m' v@yM! " a g • " Ÿv; ' vL

hgÃ Ē@Y6; m' vÃÃ` oĭ

^, \$, ., \*, +, ?, |, \, /, (, ), [, ], {, }, =, !, :, - ,  
 ] r s ‡ p; ' v 8cJ@RSN' " vĭ

```
var string = "^$. *+?|\\W[\\W]{=!:-, ";
var regex = /^\\$. *+?|\\W\\W[\\W]{\\W}\\W=\\!\\: \\-\\, /;
console.log( regex.test(string) );
// => true
```

± a string a ; \ ' v} p " v; L

HI @Ž string a @} RSÜâí ' v " v@] • @ " v \_; Ãar M8cĭ

```
var string = "^$. *+?|\\W[\\W]{=!:-, ";
var string2 = "\\^\\$. *+?|\\W\\W[\\W]{\\W}\\W=\\!\\: \\-\\, ";
console.log( string == string2 );
// => true
```

Ê Ž; . 1 M@MDMâí ' v ´ Gp " v—? " @5=&gt;L

5.2.3.1. ' vC<sup>a</sup> ; m' v

8' vCòô; m' vg [, ], ^, -LxCŽEDotv; î ĵ ê ë " vLJ` ' Q; ^ \$ý " v@D•  
 EÜ1í ' vC@5° Ev' vCL

```
var string = "^$. *+?|\\W[\\W]{=!:-, ";
var regex = /[\\^$. *+?|\\W\\W[\\W]{=!:\\- , }/g;
console.log( string.match(regex) );
// => ["^", "$", ".", "*", "+", "?", "|", "\", "/", "[", "]", "{", "}", "=", "!", ":",  

"-", ",", ""]
```

## 5.2.3.2. r s "[abc]" µ "{3,5}"

| %Ä» [abc]@Mí ' vCL` apr s' vw "[abc]" J@Û• u' ?

RSž ° /\[abc\]/@} RSž ° /\[abc\]/@• €` oĭ

```
var string = "[abc]";
var regex = /\[abc]/g;
console.log( string.match(regex)[0] );
// => "[abc]"
```

t GpŽhNí ħ 67¨ v fR@x ö \_p; ħ 67 D° ' vC@! " DED, †v@• • DGp¨ vL

ýx@p r s' v w "{3,5}"@t GpÜ! " ž ° /\{3,5}/ fRL

HI @| %Ä»' r gÎ ž Ä% {m,}@Qbg {,n} ; =>L¯ • \_=D ° ' r ; Ä%@ACJ ōDEA  
BL] • @r s; ' v w} M "{,n}"@• €` oĬ

```
var string = "{,3}";
var regex = /\{,3}/g;
console.log( string.match(regex)[0] );
// => "{,3}"
```

### 5.2.3.3. ±²=>

ø` =, !, :, -, , ev7@t pDŽ• " Ä ª @ōDGp¨ vL

AM@67Gp+\_´¨ v; @` /\(123\)/L

ª ZÍ o; ^, \$, ., \*, +, ?, |, \, / e' v@t pDŽ' vC- @´ Gp¨ v; L

## 5.3. ĐJ ( s

¼ox( spÍ J E@NÍ Î E; @NÍ ©j ; L

### 5.3.1 c' ö

! " # \$ % MĬ

/^\d{15}|\d{17}[\dxX])\$/

xö< Ė | ; â2‡üà@hS! " ( ° äph( \d{15} µ \d{17}[\dxX]L

\d{15} #N 15 ýRĚ€' L

\d{17}[\dxX] #N 17 ýRĚ€' @ü\_NýRSME' @RSfŠŽ' % "x"L

R« ¬` oĬ

### 5.3.2 IPV4 î "

! " # \$ % Ml

/^((0{0,2}\d|0?\d{2}|1\d{2}|2[0-4]\d|25[0-5])\.){3}(0{0,2}\d|0?\d{2}|1\d{2}|2[0-4]\d|25[0-5])\$ /

7Í ! " @5oxAB" ^ LAM¢• â 2‡\_@E–) c à ` o; Ã Ì

((É)\.){3}(É)

±ª @pÍ (É) MN9; Ã L#Nr s; M 3 ÿ€' LxC1Í Ã M

3ÿ€ .3ÿ€ .3ÿ€ .3ÿ€

• \_l x ( s (É)l

(0{0,2}\d|0?\d{2}|1\d{2}|2[0-4]\d|25[0-5])

< MNÍ á ÁÃ @( ° 5Í h( l

¥ 0{0,2}\d@r s Nÿ€@p6 "0" —~ ; Lø` @"9", "09", "009"s

¥ 0?\d{2}@r spÿ€@p6 "0" —~ ; @} p6Nÿ€s

¥ 1\d{2}@r s "100" 6 "199";

¥ 2[0-4]\d@r s "200" 6 "249"s

¥ 25[0-5]@r s "250" 6 "255"L

Ü\_x 5No ± R« ¬ Ä%l



---

## 5.4. 8İ ŠÃ

òó! " # \$ % ^ ; â 2 ‡ \_ @ ĩ 5NO! " ó Ů ´ g • ´ ( so ï ä L

<sup>a</sup> ZJ £ @DNÒ ‡ @bgž ná L

7Ě™šÃÃNo@< Œ; â 2 ‡ ü à @f ü \_ > ñ L

t p Ä » 7N6@yX<Šfh(! " L

HI ôZm' v ¨ v · ¹ @] • ´ Du • · " J @¹ Âî ¨ v @ÂfMDEB; L

## 6. h=İ ! " # \$ % ; ĭ

dZNÔ| , ; òó¥å•u9@RSgpÍ @åx&' Ì <μž L

DJþ5ŠK^ ; y\¿ Ð@} þXœ-î y\· ¹ LËsM79@! " # \$ % } M79L

· Ò<Óðø@Òž Ó¿¿ É ö % þ @7Í » xMD, ÒO; L

d! " ; > Y@1%yMÌ ` O• d· ¹ @ ĭ NÍ Āž ; ! " # \$ % ?

8İ yy\Û· ¹ @- . p6Ì

¥ Ô&§ "

¥ ĭ ! " +ñ

¥ +uÿ

¥ Þß

### 6.1. Ô&§ "

ĭ ! " gN6AB%p@Gþ- 6opÆ6; Ô&Ì

¥ r sŸÍ ; ' vw

¥ Dr sAŸÍ ; ' vw

¥ R<ŸμRr Ÿ

¥ Þß

### 6.2. ĭ ! " +ñ

#### 6.2.1. M" XŸY! " ?

! " nvfä@Sª Z| %TUã6NÍ Ð~ ' vw· ¹ J@´ Eo³ aî Ì €@Y! " Û• u- LA| %  
adþñĭ • ' @! " ~ • vf@ADM¢X; @7á5<7Î E; ½=@±M- D6; L

ø` r s79; ' vwÌ 1010010001É .

~ • 7gİ ' @AMt • ! " yMØXöŽL

#### 6.2.2. M" g\$þŸY! " ?

þ• a6! " ; , } @Dþì de£8Ø§ ^° ; N꜠LýJ @} DX†LHNÍ ¥ÂÌ ØhDY! " LX  
Y' vw API y\; Î E· ¹ @yDÛ! " à) L

ø` @...Ì Íª ñØàÎ Ĩ Ì @~ • RSŸY! " Ì

```
var string = "2017-07-01";
var regex = /^(\\d{4})-(\\d{2})-(\\d{2})/;
console.log( string.match(regex) );
// => ["2017-07-01", "2017", "07", "01", index: 0, input: "2017-07-01"]
```

±Ä@RSŸY' vw; split ¿ \$x - @fRl

```
var string = "2017-07-01";
var result = string.split("-");
console.log( result );
// => ["2017", "07", "01"]
```

ø` @p±M" g· 7@` • RSŸYl

```
var string = "?id=xx&act=search";
console.log( string.search(/\\?/) );
// => 0
```

±Ä@RSŸY' vw; indexOf ¿ \$l

```
var string = "?id=xx&act=search";
console.log( string.indexOf("?") );
// => 0
```

ø` μØEw@` • RSŸY! " l

```
var string = "JavaScript";
console.log( string.match(/. {4}(.+)/)[1] );
// => Script
```

±Ä@RS» ¼ŸY' vw; substring , substr ¿ \$x - l

```
var string = "JavaScript";
console.log( string.substring(4) );
// => Script
```

### 6.2.3. M" g\$p j Nl @j ; ! " ?

ø` üsr s· ¹ @pwüsøå 6-12 ý@` €' , Šž' vμfž' %C° @A\$ýª ~p6 2 Å'  
vL

Žh2l Ě@| %ž à ä! " Ml

/(?!^[0-9]{6,12}\$)(?!^[a-z]{6,12}\$)(?!^[A-Z]{6,12}\$)^[0-9A-Za-z]{6,12}\$/

±ÄRSŸYáÍ Š! " x – Ì

```
var regex1 = /^[0-9A-Za-z]{6,12}$/;
var regex2 = /^[0-9]{6,12}$/;
var regex3 = /^[A-Z]{6,12}$/;
var regex4 = /^[a-z]{6,12}$/;
function checkPassword (string) {
  if (!regex1.test(string)) return false;
  if (regex2.test(string)) return false;
  if (regex3.test(string)) return false;
  if (regex4.test(string)) return false;
  return true;
}
```

## 6.3. + u Ÿ

h{ +uŸ@yMXr s ŸÍ ; , \* @ð\Dr s AŸÍ ; , \* L

7Ëñ6ä ÒŸÍ Óq' @• u | %y Gp Ä» , \* ; C° Ĩ " L

D• b § M• >u 9 ; , \* ' v w M v ÄŸÍ ; @>u 9; ÚDMv ÄŸÍ ; L

op(EVJ / O@] , \* ' v w ° ø ù © j J @ Ũ ` O ĩ ! " @ð° ± 6 + Ÿ Ô & L

### 6.3.1. r s | • ¢°

ø` p r s ` o æ % ; | • ¢° 7 s ĩ

```
055188888888
0551-88888888
(0551)88888888
```

hN( @ä y Ó h ( ; t % Ĩ " L

‡ p ; ¢° @ Â î ‡ ( ö Ò 7 µ 7 s p h ( ™ D ° ± ( • 7 µ "+86" ; = Ä Š L

Õ 7 M "0" ' Q ; 3 6 4 Ÿ € ' @ d ó ; ! " M ĩ 0 \ d { 2 , 3 } @

7 s M A "0" ' Q ; 7 6 8 Ÿ € ' @ d ó ; ! " M ĩ [ 1 - 9 ] \ d { 6 , 7 } @

x C @ r s "055188888888" ; ! " M ĩ /^ 0 \ d { 2 , 3 } [ 1 - 9 ] \ d { 6 , 7 } \$ / @

r s "0551-88888888" ; ! " M ĩ /^ 0 \ d { 2 , 3 } - [ 1 - 9 ] \ d { 6 , 7 } \$ / @

r s "(0551)88888888" ; ! " Mĭ /\(0\d{2,3}\)[1-9]\d{6,7}\$/L

hq( @OuÄ%ôÁL

7V==ÄM<sub>s</sub> ; ôÁ@RS ĭ ( ÖĬ

/^\d{2,3}[1-9]\d{6,7}\$|^0\d{2,3}-[1-9]\d{6,7}\$|^\(0\d{2,3}\)[1-9]\d{6,7}\$/

ñØĭ /h(ĭ

/^\(0\d{2,3}|0\d{2,3}-|\(0\d{2,3}\)\)[1-9]\d{6,7}\$/

êN( ĭ ž ĭ

/^\(0\d{2,3}-?|\(0\d{2,3}\)\)[1-9]\d{6,7}\$/

±R« ¬Ä%ĭ

‡p; ! " ĭ ¾¥5\$ " ©@AM79–@X<sup>a</sup> ö! " M+u; L

‡eVÅ=ÄM<sub>s</sub> ; ôÁ@7N67%p@D• 7. ®„ ' vM" àÊ; =ÄÜ! " ž ° ĭ

/^\(0\d{2,3}\)?-?[1-9]\d{6,7}\$/

ˆ • } Xrs‡e, \*' vw@A} Ers "(0551-88888888" 79; ' vwL ] • @7DMĭ %€p; L

±Ä7Í ! " } DM^ç; @xöÊÄ<sup>a</sup> @ðDMâÍ 3 ŷ€µ 4 ŷ€´ MNÍ { Ä; Ö7L

7yMNÍ Ô&Ø« · ˆ @Nó¶YyëL

### 6.3.2. r s ¬6€

pwr s` o; æ%ĭ

1.23, +1.23, -1.23  
10, +10, -10  
.2, +.2, -.2

RS5à! " ( öVh( L

v7h( ĩ [+~]@

1€h( ĩ \d+@

Š€h( ĩ \. \d+L

‡eVÍ h( @ǒDMéh´ àÊL` aCJ 7. ®ž à` o; ! " ĩ

/^[-]?(\d)?(\. \d+)?\$/

C! " 5<b. ´ @A7Í ! " } Er sz' v ""L

xö, \*´ vw; Ä%ôÁDMpwâh( ´ MRÁ; L

pr s "1.23", "+1.23", "-1.23"@RSY/^[-]?\\d\\. \d+\$/@

pr s "10", "+10", "-10"@RSY/^[-]?\\d\$/@

pr s ".2", "+.2", "-.2"@RSY/^[-]?\\. \d\$/L

xC1Í ! " M7V=; ٭ ; ôÁ@ñØ! - h( \_Mĭ

/^[-]?(\d\\. \d+|\\d+|\\. \d+)\$/

±R« ¬Ä%Mĭ

` aṑwDr s "+.2" μ "-.2"@CJ! " ° ĩ

] • @/^[ - ] ? ( \d \. \d + | \d + | \. \d + ) \$ / } DM ^ ç ; @ | % } M – ä Ý Ø « @ ø ` Ì

< } Er s "012" 79S "0" ' Q; 1 ∈ L ` a p w Dr s ; ° @ G p ð Ñ 1 ∈ h ( ; ! " L N ó ê ë F  
ö ð ~ f + @ ´ p Û ¾ trim µ p z L • 9 ; ° @ } Z • Í B ® ! " } y ¶ Y ä L } RS ê N ( Ñ ž ° Ì  
/ ^ [ - ] ? ( \d ) ? ( \. ) ? \d + \$ / @ 7 9 | % y G p ° ± R < Ý µ R r Ý ä L

## 6.4. Þ ß

<sup>a</sup> ö ä + u ÿ \_ @ ¯ G p M " p ° ± p â ¬ L f á € = Ä M D G p â ¬ ; @ > A > ë ; A B , L > u = Ä !  
" # \$ % > ë ¯ , – ? | % G p ° è ! " # \$ % ; > ë ¾ ¥ ™ £ x š L

! " # \$ % ; > ë ( ö ` o ; Õ § Ì

¥ 1. • ï s

¥ 2. æ • o a ÿ w s

¥ 3. Ä € r s s

¥ 4. r s W X ; ° @ ... o N ÿ ' a Ü È h 3 ( s

¥ 5. ü d Ã a Ì r s ° . , W X L

o p S Ë s ö J @ x 5 5 7 Æ Í Õ § ´ – ä > u Ì

```
var regex = /\d+/g;
console.log( regex.lastIndex, regex.exec("123abc34def") );
console.log( regex.lastIndex, regex.exec("123abc34def") );
console.log( regex.lastIndex, regex.exec("123abc34def") );
console.log( regex.lastIndex, regex.exec("123abc34def") );
// => 0 ["123", index: 0, input: "123abc34def"]
// => 3 ["34", index: 6, input: "123abc34def"]
// => 8 null
// => 0 ["123", index: 0, input: "123abc34def"]
```

š î ( s ` o l

```
var regex = /\d+/g;
```

] % ° N í ! " J @ D ™ E d ± ê ë • ï L A B · " à Ê 7 7 Í Õ Š L

```
regex.exec("123abc34def")
```

] Å € r s J @ G p u • ... + N ŷ w ' a r s L N Ó = Ä ´ M' v w ; ' Q @ f h 0 ŷ L

A] Ÿ Y test µ exec ¿ \$ @ \ ! " g g J @ o a ŷ w M ... ! " d o ; lastIndex : Ÿ ' a L

x C h N i exec M ... h 0 ŷ ' a @ Ò h q i M ... 3 ' a ; L

æ • Ü o a ŷ w \_ @ y ' a Å € r s ä L

ø ` h N i exec @ ... 0 ' a @ ì Å € r s @ ð \ ° . î r s 6 3 Í € ' L C J Ä ¯ J ; o \* M 2 @ x C o  
N i ; o a ŷ w M 3 L

Ò h q i @ o a o \* M 3 @ A h 3 Í ' v M " a " @ ð D M € ' L A C J ð D E » ¼ A r s W X @ Ò M ° ~ 6  
o N ŷ w @ f ... h 4 ŷ ' a Ü È Å € r s @ A Û ' v M " b " @ } D M € ' L Ì ° ~ 6 o N ŷ @ M " c " r D  
ë @ ì ° ~ N ŷ M € ' " 3 " @ C J r s 6 ä p ŷ € ' " 3 4 " L C J @ o N i r s ; ŷ w M " d " ; ŷ w @ f h  
8 ŷ L

h V i @ M ... h 8 ŷ ' a r s @ » 6 € 6 ü \_ N ŷ @ } b , Ê r s ; @ x C r s W X @ 5 9 null L ý J æ  
w lastIndex ö 0 @ f @ ` p Ì Å € r s ; ° @ G ... Q ' a L

... ‡ p R S 5 à @ r s E à Ê Þ ß · ¹ @ F p à Ê Ž ‡ p ; h 3 Õ Š µ h 4 Õ Š L

x C @ F p â ¬ , § } M • d 7 p Õ Š ; L

6.4.1. Ÿ Y š î P' v C x È è ½ s v @ x ± > 9:

Ò Ž h V Õ Š @ ü f ; · ¹ y M 9 : L

J ` @ r s Û D Y 7 f K ; ' v L ` @ r s ' v w 123 " a b c " 456 ª ; " a b c " L



` a! " Y; Ml /".\*"/@EŽh 3 ŒŒf‰ 4 i 9: ™² É#N .\* r s; - . šl

` a! " Y; Ml /".\*?"/@Ef‰ 2 i 9: ™² É#N .\*? r s; - . šl

x ö 9: ; : Ž@GpD™ª : áÅRXª ³ Å€¾; TU@SU\_È 9: JŸYŁö•p¨YN•; - :

L

CJ pÿYšî ¬; ' vC@xĖè½sv.@SU±&gt; D\$p; ' v@CJÿY! " /"[^"]\*" /@fRL

### 6.4.2. ŸYAΑμP( C

xö67; ~ YfNM@RSAμ( Cμ( ÖĖ; €BL• uyGp- : x<sup>a</sup> : < %L

] | %DGpÿY( CDYμEODYJ @CJ RSŸYAΑμ( CL

J ` @/^[~]?(\\d\\.\\d+|\\d+|\\.\\d+)\$ / RSDÑ° ĭ /^[~]?(?:\\d\\.\\d+|\\d+|\\.\\d+)\$ /L

### 6.4.3. œ– à u • ' v

J ` @/a+ / RSDÑ° /aa\*/L

xö\_=Xø+=á u • ä' v "a"L79EŽh8( <sup>a</sup> @éVp‡M" r sWX@êÒéV° ÿ; WåL

### 6.4.4. ñØ( Ö| / h(

ø ` @/^[abc|^def / ÐÑ° /^(?: abc|def) /L

Úø ` @ /this|that /ÐÑ° /th(?: is|at) /L

79– @RS[ ~r s¾¥<sup>a</sup> R±> ; %©L

### 6.4.5. [ ~ ( Ö; €' @´ Š< %; ? @

/red|read / RSDÑ° /rea?d /L

CJ ( Öμ' r f %; 9: ; ° 8MDN9; LA79â¬\_@R&lt;ŸEμà; L

## 6.5. 8İ ŠÃ

8İ á ; - . őDáL

Nó=>o@• dŠ• <sup>1</sup> Xž àNí †‡Gw; ! " @» 8‡yRSäL<sup>a</sup> Z+uŸμƳβ¿p; @w@¶: 5Í ^ pwäL | bc¶YyëäL

ôZ+uŸ@8İ ô' ; MüBY; y\¬Ñĭ

• dâÅ=Ä@( Kž à! " @• Y( ÖÜ&lt; %ÃőŽNo@ĭ ñØ( Ö| / h( @yXc6+u; ! " L

<sup>a</sup> Zâ¬@8İ bgöä• €@ì ž Nf, Lâyärs£x@B´; â¬, §}y7uÆÅL

## 7. hOİ ! " # \$ % • ¥

> uŽÄa@X{ p| %Ä, ; ÞBˉ ŽÄaL

efN9ÞB@` aDXŸY@üá tXñ~ ¹ ‡° » L! " # \$ %; ef@} DJ I L

òóä! " # \$ %; | \$ \_@oN( @} MòJ; N( @yMŽ{ ÄLMª ŸY< L

• u` OŸY! " # \$ %—? g+ÝôJ; 6—? 8İ yy\7Í · ¹ L

- . p6Ì

¥ ! " # \$ %; 8ÅÐ~

¥ òôAPIõ³ p6

¥ { ÅÐJ

### 7.1. ! " # \$ %; 8ÅÐ~

! " # \$ %Mr s t %@DÃ` OŸY! " # \$ %@£ˆ Dæ±¼@´ Gp2Òr s ÓL

gärs7N» 8Ð~ \_@ˉ g±Ú; Ð~ Ì Fö, ½( , ñØ, è©L

êëNOòôÐ~ @} Gp mFD™òô API ; sÃŸY L] • @Ž JavaScriptª @òô API } Dá L

#### 7.1.1. F Ö

FÖM! " # \$ %ü»¼; óY@ø` #EFÖL

Ž / Föf +@2p / ...t r s M>uæ• L

h{ r s@yM5, \*' vwĚM" g†‡r s; £wLxC@Òr s Ó; 8dyMÒ¾...ÓL

gbgr s@MDMr s ‡@p ‡M" ; Ð~ @f / öÒF öÓL

7ĚVNÍ J £@x55` OŸYòô API êëFöÐ~ ; L

ø` @p ‡NÍ ' vwª M" g€' L

ŸY searchÌ

```
var regex = /\d/;
var string = "abc123";
console.log( !!~string.search(regex) );
// => true
```

ŸY testÌ

```
var regex = /\d/;
var string = "abc123";
console.log( regex.test(string) );
// => true
```

YY **match**

```
var regex = /\d/;
var string = "abc123";
console.log( !!string.match(regex) );
// => true
```

YY **exec**

```
var regex = /\d/;
var string = "abc123";
console.log( !!regex.exec(string) );
// => true
```

±ª @ÜBY; M **test**L

### 7.1.2. ½(

r s ± ä @ | % y R S ê ë N Ý Ð ~ @ ø ` ½( L

h { Ø ½( Ó @ y M Ü , \* ' v w @ ½ ° N § N § ; L Ž JavaScriptª YY; M **split**L

ø ` @ , \* ' v w M "html,css,javascript"@, õ 7 x ½( Ì

```
var regex = /,/;
var string = "html,css,javascript";
console.log( string.split(regex) );
// => ["html", "css", "javascript"]
```

Ú ø ` @ ` o ; Ì Í æ % Ì

2017/06/26  
2017.06.26  
2017-06-26

RSYY **split** Ø ½ à Ó Î Ì Ì Ì

```
var regex = /\D/;
console.log( "2017/06/26".split(regex) );
console.log( "2017.06.26".split(regex) );
console.log( "2017-06-26".split(regex) );
// => ["2017", "06", "26"]
// => ["2017", "06", "26"]
// => ["2017", "06", "26"]
```

### 7.1.3. ñ Ø

ˆ • 1 î r s ‡ ä @ Ag J G p ñ Ø h ( r s ; € B L

C J ! " ½ B p Ÿ Y ( C D Y ™ ( C A μ š . X @ ± G p s Ã Ÿ Y ò ô A P I L

7 Ě @ ± M S ĩ í ö J @ ñ Ø à ĩ ĩ ĩ L ö ³ o p ! " ª ; 6 7 ĩ

Ÿ Y match ĩ

```
var regex = /^(\d{4})\D(\d{2})\D(\d{2})$/;
var string = "2017-06-26";
console.log( string.match(regex) );
// => ["2017-06-26", "2017", "06", "26", index: 0, input: "2017-06-26"]
```

Ÿ Y exec ĩ

```
var regex = /^(\d{4})\D(\d{2})\D(\d{2})$/;
var string = "2017-06-26";
console.log( regex.exec(string) );
// => ["2017-06-26", "2017", "06", "26", index: 0, input: "2017-06-26"]
```

Ÿ Y test ĩ

```
var regex = /^(\d{4})\D(\d{2})\D(\d{2})$/;
var string = "2017-06-26";
regex.test(string);
console.log( RegExp.$1, RegExp.$2, RegExp.$3 );
// => "2017" "06" "26"
```

Ÿ Y search ĩ

```
var regex = /^(\d{4})\D(\d{2})\D(\d{2})$/;
var string = "2017-06-26";
string.search(regex);
console.log( RegExp.$1, RegExp.$2, RegExp.$3 );
// => "2017" "06" "26"
```

ÿÿ replace

```
var regex = /^(\d{4})\D(\d{2})\D(\d{2})$/;
var string = "2017-06-26";
var date = [];
string.replace(regex, function (match, year, month, day) {
    date.push(year, month, day);
});
console.log(date);
// => ["2017", "06", "26"]
```

±ª @ÜBY; M matchL

#### 7.1.4. è ©

...@¿¿ DM, ; @½BoN( Mö ä è ©L Ž JavaScriptª @ÿÿ replace è è è ©L

ø` ÜÌ Í æ%@... yyyy-mm-dd è ©° yyyy/mm/dd

```
var string = "2017-06-26";
var today = new Date( string.replace(/-/g, "/") );
console.log( today );
// => Mon Jun 26 2017 00:00:00 GMT+0800 (ª ¿ * +J K)
```

7Ë t MÎ Eî óY ä No replaceLA@replace ¿ \$ 7Mv f; @MGp%6òó; L

## 7.2. ò ô API õ³ þ 6

...‡pRS5àYZ! " Ð~ ; ¿ \$@/g 6 Í @' vwÄJ 4 Í @! " ÄJ 2 Í

```
String#search
String#split
String#match
String#replace
RegExp#test
RegExp#exec
```

8İ D[ ñ Ê í î • y < %; ¿ ¿ ppí 3@š î RS Ě ° 9JavaScript . Ä { Ä : ; hVh( L 8İ %6  
Uà NY. ® Ä « ; î ¿ @S Ä < = L

### 7.2.1. search µ match ; Ě € . 1

| %Ä » ' v w Ä J ; • 4 Í ¿ § Ě € ´ Ö x ! " µ ' v w L

A search µ match @ E Ü ' v w ¨ © ö ! " ; L

```
var string = "2017.06.27";
console.log( string.search(".") );
// => 0
//GpĐÑ° oUÄ%fN
console.log( string.search("\\.") );
console.log( string.search(/./) );
// => 4
// => 4

console.log( string.match(".") );
// => ["2", index: 0, input: "2017.06.27"]
//GpĐÑ° oUÄ%fN
console.log( string.match("\\.") );
console.log( string.match(/./) );
// => [".", index: 4, input: "2017.06.27"]
// => [".", index: 4, input: "2017.06.27"]

console.log( string.split(".") );
// => ["2017", "06", "27"]

console.log( string.replace(".", "/") );
// => "2017/06.27"
```

### 7.2.2. match 59Ä a ; œ % . 1

match 59Ä a ; œ % @ . ! " d o M" g Đ • v g g ô L

```
var string = "2017.06.27";
var regex1 = /\b(\d+)\b/;
var regex2 = /\b(\d+)\b/g;
console.log( string.match(regex1) );
console.log( string.match(regex2) );
// => ["2017", "2017", index: 0, input: "2017.06.27"]
// => ["2017", "06", "27"]
```

bg g@59; M\* +r s œ % @ f @ € C; hNÍ m6M1î r s; - . @¼ o x M( C A µ; - . @ •  
\_M1î r s; hNÍ o\* @ü \_M7L; , \* ' v w L

g g@59; M h g r s; - . L

] bgr sJ @DÃgØ g@´ 59 null L

### 7.2.3. exec Ø match É v f

] ! " bg g J @ÿY match 59; • ÄøùáLAMg g \_@ybgôJ; • Ä index ä L

Ø exec ¿ \$yXy\7Í · ¹ @< X¼^±Ni rs\_ÜÈrsÌ

```
var string = "2017.06.27";
var regex2 = /\b(\d+)\b/g;
console.log( regex2.exec(string) );
console.log( regex2.lastIndex );
console.log( regex2.exec(string) );
console.log( regex2.lastIndex );
console.log( regex2.exec(string) );
console.log( regex2.lastIndex );
console.log( regex2.exec(string) );
console.log( regex2.lastIndex );
// => ["2017", "2017", index: 0, input: "2017.06.27"]
// => 4
// => ["06", "06", index: 5, input: "2017.06.27"]
// => 7
// => ["27", "27", index: 8, input: "2017.06.27"]
// => 10
// => null
// => 0
```

±ª ! " ÄJ lastIndex : ÿ@#NoNi rs' a; ýwL

ø`hNi rsä "2017"@' ao\*M0@/ 4Í ' v@xC7i rsÃ¯ ; ýwM 3@oNi ' ars  
; ýwM 4L

...±eËs5à@ŽÿY exec J @ÛBGpsÃÿY while « • Ì

```
var string = "2017.06.27";
var regex2 = /\b(\d+)\b/g;
var result;
while ( result = regex2.exec(string) ) {
  É console.log( result, regex2.lastIndex );
}
// => ["2017", "2017", index: 0, input: "2017.06.27"] 4
// => ["06", "06", index: 5, input: "2017.06.27"] 7
// => ["27", "27", index: 8, input: "2017.06.27"] 10
```

### 7.2.4. Ð• v g@d exex µ test ; YZ

±pñ6ä! " ÄJ; lastIndex : ÿ@#NÄ€rsJ@...' vw; lastIndex ý' aìrsL



' vw; 8Í ¿ \$@âi rsJ @´ M... 0 ' a; @f **lastIndex** : YādD` L

Ò! " ÀJ; pÍ ¿ \$ **exec**, **test**@] ! " Mé, rsJ @âNi rs ^° \_@´ EĐÑ **lastIndex**Lop  
 • | %S **test** öJ @55' M" E &qİ

```
var regex = /a/g;
console.log( regex.test("a"), regex.lastIndex );
console.log( regex.test("aba"), regex.lastIndex );
console.log( regex.test("ababc"), regex.lastIndex );
// => true 1
// => true 3
// => false 0
```

õ³ ‡pĚsª; hVi ^ Y **test**@x ö 7Ni À€rs@' a...o\* **lastIndex**@f 3 yw/' a¾  
 ...@•• y...D6äl

` abg **g**@•• ´ M...' vwh 0 Í ' v/' aÀ€rsİ

```
var regex = /a/;
console.log( regex.test("a"), regex.lastIndex );
console.log( regex.test("aba"), regex.lastIndex );
console.log( regex.test("ababc"), regex.lastIndex );
// => true 0
// => true 0
// => true 0
```

### 7.2.5. **test** 1î rsJ GpÿY ^ µ \$

7Í òd. ®xy@xö **test** M5, \*' vwa M" g£wrs! " @fgh( rsfRL

` a@p1î rs@! " +\_GpÖé' QµÃRİ

```
console.log( /123/.test("a123b") );
// => true
console.log( /^123$/.test("a123b") );
// => false
console.log( /^123$/.test("123") );
// => true
```

### 7.2.6. **split** ò ô õ³ ½Å

**split** ¿ \$ 5oxDoÆ@Apõ³; î ¿ gpÍ; L

hN@< RSghqÍ Ě€@#NÃa€C; üføål

```
var string = "html,css,javascript";
console.log( string.split(/,/ , 2) );
// =>["html", "css"]
```

h q @ ! " ' Ÿ Y ( C J @ Æ a ∈ C<sup>a</sup> M p Ÿ ( , v ; l

```
var string = "html,css,javascript";
console.log( string.split(/(,)/) );
// =>["html", ",", "css", ",", "javascript"]
```

### 7.2.7. replace M7 v f ;

9 JavaScript . Å { Å : • ö exec M7 6 Í API<sup>a</sup> ü v f ; @ Ò | a d • ö replace ~ M ü v f ; L  
x ö < } X Ç 6 Û Ç 6 ; • Ä @ • \_ R S \$ È è © f & @ – Ÿ ± Ú ½ = L

Â î x / replace g p Å Ÿ Y Ä % @ 7 M x ö < ; h q Í È ∈ @ R S M' v w @ } R S M 9 ∈ L

] h q Í È ∈ M' v w J @ ` o ; ' v g • " ; Ÿ v l

: Ÿ	ne
\$1,\$2,É,\$99	rsh 1-99Í ( C È A μ ; Î 8
\$&	rs6; f w Î 8
\$	rs6; f w ; ò é Î 8
\$'	rs6; f w ; ñ é Î 8
\$\$	ç m v 7

J ` @ Ü "2,3,5"@ `` ° "5=2+3"l

```
var result = "2,3,5".replace(/(\d+),(\d+),(\d+)/, "$3=$1+$2");
console.log(result);
// => "5=2+3"
```

Ú J ` @ Ü "2,3,5"@ `` ° "222,333,555":

```
var result = "2,3,5".replace(/(\d+)/g, "$&$&$&");
console.log(result);
// => "222,333,555"
```

l J ` @ Ü "2+3=5"@ `` ° "2+3=2+3=5=5":

```
var result = "2+3=5".replace(/=/, "$&$`$&$' $&");
console.log(result);
// => "2+3=2+3=5=5"
```

| %d ü \_ 7 í ê ë No / OL p Ü "2+3=5"@¨ ° "2+3=2+3=5=5"@± Ä y M € ' § Ü = è © °  
 =2+3=5=@±ª @ \$ & r s ; M =@ \$ ` r s ; M 2+3@\$' r s ; M 5 L x C Ÿ Y "\$&\$`\$&\$' \$&" U \$ ° ä  
 , ; L

] h q í Ê € M 9 € J @ | % G p ö ³ Ü 9 ^ 9 € ; Ê € š î M > u ĩ

```
"1234 2345 3456".replace(/(\d)\d{2}(\d)/g, function (match, $1, $2, index, input) {
  Ê console.log([match, $1, $2, index, input]);
});
// => ["1234", "1", "4", 0, "1234 2345 3456"]
// => ["2345", "2", "5", 5, "1234 2345 3456"]
// => ["3456", "3", "6", 10, "1234 2345 3456"]
```

CJ | %RS56 replace Ç 6 ; • Ä @ ð D ø exec ~ L

### 7.2.8. Ÿ Y 8 9 € G p ö ³ ; . ¹

N Ó D " # Ÿ Y 8 9 € % ° ! " @ Ò ó Û â 2 Ÿ Y ' p ' L x ö Y 8 9 € E á ž 7 á \ L

```
var string = "2017-06-27 2017.06.27 2017/06/27";
var regex = /\d{4}(-|\.\|\/)\d{2}\1\d{2}/g;
console.log( string.match(regex) );
// => ["2017-06-27", "2017.06.27", "2017/06/27"]

regex = new RegExp("\\d{4}(-|\\.|\\/)\d{2}\\1\d{2}", "g");
console.log( string.match(regex) );
// => ["2017-06-27", "2017.06.27", "2017/06/27"]
```

### 7.2.9. Ð • v

ES5ª Ð • v @ / 3 í ĩ

Ð • v	ne
g	é, r s @ f ... ó h g r s ; @ E r M g l o b a l L
i	Â 5 ' % º f Š ž @ E r M i n g o r e C a s e L
m	á ë r s @ t Y Z ^ µ \$ @ q = ¨ ° è ; œ • @ f ë ' Q µ ë Ä R L E r M m u l t i l i n e L

] • ! " d o } g ò ó ; t < : Ÿ ĩ

```
var regex = /\w/img;
console.log( regex.global );
console.log( regex.ignoreCase );
console.log( regex.multiline );
// => true
// => true
// => true
```

## 7.2.10. source : Ÿ

! " À J d o : Ÿ @ > ä global , ignoreCase , multiline , lastIndex : Ÿ f l @ ± g N Í source  
: Ÿ L

< > u J ¾ g Y — ?

ø ` @ Ž ĭ ~ U ; ! " # \$ % J @ R S ½ ¾ ¾ 5 Ũ : Ÿ @ x u • ĭ à ; ! " 6 % M > u ĩ

```
var className = "hi gh";
var regex = new RegExp("(^|\\s)" + className + "(\\s|$)");
console.log( regex.source )
// => (^|\\s)hi gh(\\s|$) f' v w "(^|\\s)hi gh(\\s|$)"
```

## 7.2.11. 89€: Ÿ

89€; É U: Ÿ » Zh Ê ë; ü É Ni ! " Ð ~ Ò " ¬ L > ä M \$ 1, É, \$ 9 f l @ ± g Æ Í D n B Y;  
: Ÿ ™ g Ñ. Ÿ. ¹ š ĩ

É U: Ÿ	ne	Î ž Ä %
RegExp.input	ü É Ni , * ' v w	RegExp["\$ _"]
RegExp.lastMatch	ü É Ni r s; Î 8	RegExp["\$ &"]
RegExp.lastParen	ü É Ni A µ; Î 8	RegExp["\$ +"]
RegExp.leftContext	, * ' v w <sup>a</sup> lastMatch f +; Î 8	RegExp["\$ `"]
RegExp.rightContext	, * ' v w <sup>a</sup> lastMatch f _; Î 8	RegExp["\$ '"]

• € È s ` o ĩ

```

var regex = /[abc](\d)/g;
var string = "a1b2c3d4e5";
string.match(regex);

console.log( RegExp.input );
console.log( RegExp["$_"]);
// => "a1b2c3d4e5"

console.log( RegExp.lastMatch );
console.log( RegExp["$&"] );
// => "c3"

console.log( RegExp.lastParen );
console.log( RegExp["$+"] );
// => "3"

console.log( RegExp.leftContext );
console.log( RegExp["$`"] );
// => "a1b2"

console.log( RegExp.rightContext );
console.log( RegExp["$'"] );
// => "d4e5"

```

## 7.3. { ÀÐJ

### 7.3.1. ŸŸ 89€%° ! " # \$ %

| %Ä» pâ 2ŸŸ' p' xË¡ ! " @AgJ! " # \$ %; Fî MDu• ; @CJ RSŸŸ 89€xË  
 ¡ Lt F **getElementsByClassName** ¿ \$@yM7X/OÛ. ¹ ; NÍ J £ L

7Ë **getElementsByClassName** 9€; ÄÊ ÑMİ

¥ ø` pµØ **className** ö "high" ; domm6s

¥ 12%° NÍ ! " ĺ /(^|s)high(s|\$)/,

¥ • \_ĺ Y±ĺ NFö | p‡ ; hgdomm6; ; &@Ç6††rs ; m6fRL

Ës` o(RS» ¼©—68î ¾5> ëPa)ĺ

```

<p class="high">1111</p>
<p class="high">2222</p>
<p>3333</p>
<script>
function getElementsByClassName (className) {
  Ê var elements = document.getElementsByTagName("*");
  Ê var regex = new RegExp("(^|\\s)" + className + "(\\s|$)");
  Ê var result = [];
  Ê for (var i = 0; i < elements.length; i++) {
  Ê     var element = elements[i];
  Ê     if (regex.test(element.className)) {
  Ê         result.push(element)
  Ê     }
  Ê }
  Ê return result;
}
var highs = getElementsByClassName('high');
highs.forEach(function (item) {
  Ê item.style.color = 'red';
});
</script>

```

### 7.3.2. ŸŸ' v w<sup>a</sup> : € B

Nó => o @ | % ^ B³ ŸŸ ∈ C x<sup>a</sup> : € B L A | 5 6 g ; Í Î<sup>a</sup> @ ŸŸ ; Q M' v w L

ŸŸ J @ r G p Ü' v w ½ ( ° ∈ C L ^ • D N • Y 6 ! " @ A Â 3 b İ İ ; @ 7 Ě ( Đ ` o ĩ

```

var utils = {};
"Boolean|Number|String|Function|Array|Date|RegExp|Object|Error".split("|").forEach(function (item) {
  Ê utils["is" + item] = function (obj) {
  Ê     return {}.toString.call(obj) == "[object " + item + "]";
  Ê };
});
console.log( utils.isArray([1, 2, 3]) );
// => true

```

### 7.3.3. if ! q<sup>a</sup> ŸŸ! " è Ě &&

ø` @ t F ready 9 ∈ @ f é Ñ ^ [ \_ ĩ Ê ë 9 ^ ™ D Ñ. I E ; š ĩ

```

var readyRE = /complete|loaded|interactive/;

function ready (callback) {
  if (readyRE.test(document.readyState) && document.body) {
    callback()
  }
  else {
    document.addEventListener(
      'DOMContentLoaded',
      function () {
        callback()
      },
      false
    );
  }
};

ready(function () {
  alert("é Ñ^ [ -")
});

```

#### 7.3.4. ÿ Y v f ; replace

x ö replace ¿ § ø ù v f @ g J Y < £ 8 DMö ä è © @ t M Ç ± r s 6 ; • Ä x – Î Ï L

7 È S ¾ Ò ' v w ™ querystring \$ Ó ´ ° Ô ö J @ ö ³ o p replace ¿ § ª @ 9 ^ 9 € £ 8 b g 5 9 NO  
 Þ ß L

```

function compress (source) {
  var keys = {};
  source.replace(/([^\&]+)=([^\&]*)/g, function (full, key, value) {
    keys[key] = (keys[key] ? keys[key] + ',' : '') + value;
  });
  var result = [];
  for (var key in keys) {
    result.push(key + '=' + keys[key]);
  }
  return result.join('&');
}

console.log( compress("a=1&b=2&a=3&b=4") );
// => "a=1,3&b=2,4"

```

#### 7.3.5. Õ Ã > Y

ü \_ 7 È Ì – Í Î E Ä Y ; ! " • € " L

š î Þ a ` o Ì

> ëPa`oÌ

Ë s @» ¼Ë ä @ò • ' X 5 c Š™Ë s Ñ• Z 9JavaScript Regular Expressions: Š Ì

```
<section>
  Ë <div id="err"></div>
  Ë <input id="regex" placeholder="f 7 L ! " # $ %">
  Ë <input id="text" placeholder="f 7 L • € Î 8">
  Ë <button id="run">• € No</button>
  Ë <div id="result"></div>
</section>
<style>
section{
  Ë display: flex;
  Ë flex-direction: column;
  Ë justify-content: space-around;
  Ë height: 300px;
  Ë padding: 0 200px;
}
section *{
  Ë min-height: 30px;
}
#err {
  Ë color: red;
```



```

}
#result{
  line-height: 30px;
}
.info {
  background: #00c5ff;
  padding: 2px;
  margin: 2px;
  display: inline-block;
}
</style>
<script>
(function () {
  // μØðódomm6
  var regexInput = document.getElementById("regex");
  var textInput = document.getElementById("text");
  var runBtn = document.getElementById("run");
  var errBox = document.getElementById("err");
  var resultBox = document.getElementById("result");

  // Ö• 6 × ½¼
  runBtn.onclick = function () {
    // ...> B®μÃa
    errBox.innerHTML = "";
    resultBox.innerHTML = "";

    // μØ! " μÎ 8
    var text = textInput.value;
    var regex = regexInput.value;

    if (regex == "") {
      errBox.innerHTML = "f 7 L! " # $ %";
    } else if (text == "") {
      errBox.innerHTML = "f 7 L • €Î 8";
    } else {
      regex = createRegex(regex);
      if (!regex) return;
      var result, results = [];

      // bgĐ• vg; ° @EØ« •
      if (regex.global) {
        while(result = regex.exec(text)) {
          results.push(result);
        }
      } else {
        results.push(regex.exec(text));
      }

      if (results[0] == null) {
        resultBox.innerHTML = "r s 60f Ãa";
        return;
      }
    }
  }
}

```

```

    }

    // I $Mg $p;
    for (var i = results.length - 1; i >= 0; i--) {
        var result = results[i];
        var match = result[0];
        var prefix = text.substr(0, result.index);
        var suffix = text.substr(result.index + match.length);
        text = prefix
            + '<span class="info">'
            + match
            + '</span>'
            + suffix;
    }
    resultBox.innerHTML = "r s 6" + results.length + "Í Ãa:<br>" + text;
}
};

// %° ! " # $ % @ Û ' 9€
function createRegex (regex) {
    try {
        if (regex[0] == "/" ) {
            regex = regex.split("/");
            regex.shift();
            var flags = regex.pop();
            regex = regex.join("/");
            regex = new RegExp(regex, flags);
        } else {
            regex = new RegExp(regex, "g");
        }
        return regex;
    } catch(e) {
        errBox.innerHTML = "ØP; ! " # $ % ";
        return false;
    }
}
})();
</script>

```

## 7.4. 8İ ŠÃ

ò ô API ; õ³ 6@8İ » 8‡ñMNÃ[¹ ä L

<sup>a</sup> C@ÚÛ' @' e ^ ä JavaScript ! " # \$ % ; hg- . L



| l • ž ä N8( ¬ € € y P' ' ; L

7MÍ ^ ; hN8( @¯ • DS@A} ñM^° ä Í ^ ; NÍ ŠÜ€äL

/o! " # \$ % @| f h S E ì Ê í î d e < @ ù Û ; ~ • M @ ] | ( s + Â B ´ ; Í Î µ Ý ; Þ s J @ ,  
Ê N ó • ß g ; î ¿ y M k L \_ x ì à e f ð 5 Š ä Ò k ( Ó @ á â ê L ä N Í Ê L M L

gÝ™šyM79@] ' b g < J @ R X ð ³ b c g € D Ü @ R M N ä ' ä g ä < @ ì } ~ D o , ä L ò ó  
! " ä \_ @ d ' v w N Ý © j Ð ~ @ l • X 7 V î Ä Ê L 5 ä · ¹ ; @ ä } , % ä Ñ ¨ @ â i 5 ^ Í æ ; !  
" Ê s @ Â M 3 b { M ç D R , L

] • @ d | Ò , @ ! " # \$ % D J ó Y Ž Ê s Ê L % è ª } E Û B Ý Y < L ø ` Í ^ Ò J 9 % Ä ? · ¹ J @  
N Ý Ä é é • Ê Ê ; Ê s ª ' v ´ M ¨ v ; L C J | ´ E Ê 6 Š Í • ž " Ê @ • \_ ž Í ! " @ ì N i Ý è ©  
@ { ¿ U L

H I N Í J £ M @ N Ý Ê s • ž " ; Ê s æ % ¬ . X @ Â g • ^ D è Æ ; î ¿ @ C J | ´ E Y ž Û ! " # \$  
% @ ì æ % ¬ N o L

± g N Í 7 ó H ; J £ @ Ž • ž 8 ( J @ Û B þ Ž { • ý w ì L • • ; | § æ % @ ø ` Ê s § + p þ ì L Ò [  
source, javascript] \n ---- Ó 7 9 ; ' v @ C J @ | , Ê | ; f h ( Ê s § @ ´ M v a r ´ Q ; @ ð \ + p g N  
z è L C J | [ ' ¾ ... è © . X @ ¾ ... Ò ( ^ \ r \ n ) v a r Ó @ è © Ò Ò [source, javascript] \n ---- \n v a r Ó L 7  
u Ä } i | y \ N h ( ¯ L

] • @ ! " # \$ % M 8 š î | , ¯ ø ` J a v a S c r i p t š Ø ø ; L x ö ! " # \$ % M Y x / x ' v w · ¹ ; @ »  
8 ‡ â Ò | , ´ g ' v w ; P @ • u } ´ E Ö x ! " # \$ % ; L ! " # \$ % M ( • í ; @ } 8 Ä Ê D ¯ g ò  
L Ò J a v a S c r i p t Y 6 ; ! " # \$ % ; | § @ M î p B ´ | , ´ Ö x ; Û ' £ ï L ò Z A P I @ Ó | , » 8 f ý Š  
ð @ € Y ; ° @ ó Û 7 V y X ¢ • o x L

ô Z ! " # \$ % y / 6 7 Ê @ o p / N / • ' ž 7 8 ( ; è µ L

g ^ / ü Û ; e f ¿ § y M ž N 8 ( L ± Ä @ þ € Ü Ä a ò ó ñ | @ ò £ 6 % y M Y o x L ž ( , = / ž ~  
M N Å 7 Û ; S ¤ ö e ; , § L [ l @ Ä ¯ Í ' @ ¤ â K ^ ñ M d Ä a ; ü » ¼ ; ó Y ä L 5 < ö ä ¤ @ ±  
Â M ö ä e L t g ¤ E K ^ ¯ / O ' ò ó ä L Ò S ¤ ö e Ó ; , § > ä ž Þ ß f l @ ± g î ï , S p d p  
; ó p e L

S , \* ö þ O ; - ª e @ M ø ù g Þ ; e f , § L 8 ( M Y A s c i i d o c ž ° ; L < ; < Z M a r k d o w n @ A Ž C (   
f + 8 ^ ´ b g Y ¾ L S G w ö ø ~ @ ì ( ä ä õ ^ @ • ' ¯ ì à Û ( 1 x Ü ä L ± ª ä 6 ä 7 á · | § Ø  
ô ; · ¹ @ ø ` ¨ © p d f ; ¾ ¥ ª Y ; ¯ š > è D o x @ • ' b ... £ x @ ö ^ 3 b Ð Ñ - 8 7 e L Ú ø ` þ à  
; p d f g l ' ; · ¹ @ ä ä O Ú \_ ¯ , Ê 8 ' î g ô L é a é e @ â y \ ì N Í · ¹ @ ´ P g † ‡ 3 ; L ] ^  
· ¹ ì d e ì e f @ 7 M N Å · ¹ ¬ r L • Ò N J ; y \ ¿ Ð ± D ¶ @ \_ x | Ê í î ³ < ä A s c i i d o c Ý Y ,  
÷ @ } Û B g Ò £ x @ ± R S 7 9 ž ¬ Ó ; î £ L

7 6 8 | % Ö B ¯ 7 ø @ S Ä , ö þ O @ Y € e € L ø ` Û e N Í Í Î @ 2 a o x @ é 5 Î ù @ é ú Ê s  
L Ê s ú ^ ä @ ± þ Ê í î 5 N T Î ù @ ù J E , Ê ± g É Û ; Ä Ê ¿ % L D t g Æ + ; ü \ @ ± E g O k  
; ý Ê L

HI N6@| KKî E6ä@a^Î Epj ; ™~ M• 9; î FLNTTï d@NTTĐÑLâi @5´ E  
, ÊÊ; å^ÿ; î ĸLSª ZÊŽ| 3bEÛXÜ8(! oxä@E^; ™~ uÀ° F^; "´ L  
yž67ĚcL` a' bcC( DB; ° @#\$t uL  
ü\_@| %Û€o%&' ^ d+Â-à; ( ) ĩ  
¹ ‡cxdbM@bÄC½p\* ëL  
^L

W<sup>3</sup>/<sub>4</sub>#

' p'	
t %	/ O
' %, €'	r s' p' 8cLø` /f/@r s' %o "f"L
\0	r s NUL ' vL
\t	r s( Ô—#vL
\v	r s α» —#vL
\n	r s ©ëvL
\r	r s 9¥vL
\f	r s ©  vL
\xnn	r s +, ' vLø` \x0A e« Z \nL
\uxxxx	r s Unicode ' vLø` \u2028 r s ëdÝv@\u2029 r s §dÝvL
\cX	r s ctrl+XLø` \cl r s ctrl+l@e« Z \tL
[\b]	r s Backspace J ™• " ÷ š L
' vC	
t %	/ O
[abc]	r s "a", "b", "c" ± <sup>a</sup> NONÍ ' vL
[a-d1-4]	r s "a", "b", "c", "d", "1", "2", "3", "4" ± <sup>a</sup> NONÍ ' vL
[^abc]	r s > ä "a", "b", "c" fI ; NONÍ ' vL
[^a-d1-4]	r s > ä "a", "b", "c", "d", "1", "2", "3", "4" fI ; NONÍ ' vL
.	½sv@r s > ä ~€' v ™\nš fI ; N <sup>3</sup> ' vL
\d	r s €' @e« Z [0-9]L
\D	r s A€' @e« Z [^0-9]L
\w	r s Er' v@e« Z [a-zA-Z0-9_]L
\W	r s AEr' v@e« Z [^a-zA-Z0-9_]L
\s	r sz Úv@e« Z [ \t\v\n\r\f]L
\S	r s Az Úv@e« Z [^ \t\v\n\r\f]L
' r	
t %	/ O
{n,m}	RĚàĚ n 6 m i L μ ¶ t %L
{n, }	<sup>a</sup> ~RĚàĚ n i L μ ¶ t %L
{n}	RĚàĚ n i L μ ¶ t %L
?	e« Z {0,1}L μ ¶ t %L
+	e« Z {1,}L μ ¶ t %L
*	e« Z {0,}L μ ¶ t %L
{n,m}?	RĚàĚ n 6 m i L , Ÿ t %L
{n, }?	<sup>a</sup> ~RĚàĚ n i L , Ÿ t %L
{n}?	RĚàĚ n i L , Ÿ t %L
??	e« Z {0,1}?L , Ÿ t %L
+?	e« Z {1,}?L , Ÿ t %L
*?	e« Z {0,}?L , Ÿ t %L
Ÿ w	
t %	/ O

<code>^</code>	<code>rs' Q; ýw@] ! " gĐ• v m J @# Nrs ë' QýwL</code>
<code>\$</code>	<code>rsÃR; ýw@] ! " gĐ• v m J @# Nrs ëÃRýwL</code>
<code>\b</code>	<code>rsEr éM@f@w · \W, ^ · \w, \w · \$ fK; ýwL</code>
<code>\B</code>	<code>rsAEr éM@f@w · \w, \W · \W, ^ · \W@W · \$ fK; ýwL</code>
<code>(?=abc)</code>	<code>rs "abc" +p; ýw@fCýw_prs "abc"L</code>
<code>(?!abc)</code>	<code>rsA "abc" +p; ýw@fCýw_pDr s "abc"L</code>
67; ~ Y	
<code>t %</code>	<code>/O</code>
<code>(ab)</code>	<code>AµP( CLÜ "ab" ] ° NÍ 1î @ø` (ab)+ #N "ab" ª ~RÈàÊNi L</code>
<code>(?:ab)</code>	<code>AAµP( CL· (ab) ; ÖKM@&lt; DAµEBL</code>
<code>(good ni ce)</code>	<code>AµP( ÖÃ Lrs "good" , "ni ce"L</code>
<code>(?:good ni ce)</code>	<code>AAµP( ÖÃ L· (good ni ce) ; ÖKM@&lt; DAµEBL</code>
<code>\num</code>	<code>EODYLø` \2@#NDY; MhqÍ 67Ë; Aµ; EBL</code>
Đ• v	
<code>v 7</code>	<code>/O</code>
<code>g</code>	<code>é, rs@...6hgt†rs; £wL</code>
<code>i</code>	<code>rs¾¥ª @Ã5j Î ' %ofŠžL</code>
<code>m</code>	<code>áërs@Ü ^ µ \$ `` ° ë' QµëÃRL</code>
StringòôÃJ ¿ S	
<code>: Ý</code>	<code>¿ S~ Y/O</code>
<code>search</code>	<code>59! " rs6; hNÍ £wŽ, *' vwª ; o* ýwL</code>
<code>split</code>	<code>S! " rs6; £w@d, *' vwêë½( L59NÍ €CL</code>
<code>match</code>	<code>d, *' vwÊë! " rsĐ~ @59; rsÃa€Cª pÝšî ; rs• ÄL</code>
<code>replace</code>	<code>d, *' vwêëë©Đ~ L! " M±hNÍ Ê€L59è©_ ; ' vwL</code>
replacehqÍ Ê€ª ; • " ' v	
<code>' v</code>	<code>/O</code>
<code>\$1, \$2, É , \$99</code>	<code>rsh 1-99 Í ( CEAµ; Î 8</code>
<code>\$&amp;</code>	<code>rs6; £wÎ 8</code>
<code>\$`</code>	<code>rs6; £w; òéÎ 8</code>
<code>\$'</code>	<code>rs6; £w; ñéÎ 8</code>
<code>\$\$</code>	<code>çmv 7</code>
RegExpòôÃJ ¿ S	
<code>: Ý</code>	<code>¿ S~ Y/O</code>
<code>test</code>	<code>p†, *' vwª M" gt†! " rs; £wL59- . QL</code>
<code>exec</code>	<code>ø match Évf; ! " rsĐ~ L59Ãa· match N&lt;L</code>
RegExpÉ U: Ý	
<code>: Ý</code>	<code>¿ S~ Y/O</code>
<code>\$1, É , \$9</code>	<code>üÉNi h 1-9 Í ( CAµ; EBL</code>
<code>input</code>	<code>üÉNi , *' vw@RSÎ ž° \$ _L</code>
<code>lastMatch</code>	<code>üÉNi rs; Î 8@RSÎ ž° \$&amp;L</code>
<code>lastParen</code>	<code>üÉNi Aµ; Î 8@RSÎ ž° \$+L</code>
<code>leftContext</code>	<code>, *' vwª lastMatch f+; Î 8@RSÎ ž° \$`L</code>
<code>rightContext</code>	<code>, *' vwª lastMatch f_ ; Î 8@RSÎ ž° \$'L</code>

Ô | ^ a ; î ð / #

! " # \$ %	regular expressions
' v C	character classes
E v' v C	negated character classes
? @ # \$ % &	range expressions
m' v	metacharacters
½ s v	wildcard character
© ë v	newline character
9 ¥ v	carriage return character
( Ô — # v	tab character
␣ » — # v	vertical tab character
©   v	form feed character
z Ú v	whitespace
§ d Ý v	paragraph terminator
ë d Ý v	line terminator
E r' v	word characters
A E r' v	non-word characters
€' ' v	digits
A €' ' v	non-digits
' % €' ' v	alphanumeric characters
' r	quantifiers
µ ¶' r	greedy quantifiers
˘ ˘' r	lazy quantifiers
ÿ w	positions
ä	anchors
ë' Q	beginning of a line
ë Ã R	end of a line
E r é M	word boundaries
A E r é M	non-word boundaries
O + ¾ ...	lookahead
! O O + ¾ ...	positive lookahead
ð O O + ¾ ...	negative lookahead
O _ ¾ ...	lookbehind
! O O _ ¾ ...	positive lookbehind
ð O O _ ¾ ...	negative lookbehind
( C	groups
A µ ( C	capturing groups
A A µ ( C	non-capturing groups
( Ö Ã	alternations
E O D Y	back references
9 :	backtracks
> ñ v	operators

â 2 ‡	priority level
Đ • v	flags
é , r s Đ • v	global flag
Â 5 f Š ž Đ • v	ignoreCase flag
á ë r s Đ • v	multiline flag



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8( MØ8f 4@F pË ° ; MÆ8( PLS o( Pª Û' Ĩ 3´ • { ³ <¾@Uª ³ <áTL

9JavaScript . Å{ Å: @5^8ÅU@ĭ ĩ 5(ª ; h 10 Ĩ @' yÄ» ä >uŽ' ' O1L

9Í ½! " # \$ % : @. À\øùj k@| ³ <; hN8! " # \$ %( PL

9! " # \$ % \$ Ä \$ E: @7M| 5; hq8! " @5^\_@u••' ñMLÔä L

9! " { D: @9Í ½! " # \$ % : ; ĩ =ž; @òd...©L

9! " # \$ % L Ô: @| 5; Mĭ Î - ; @dZEÛLÔ; | @» 8bá ~èµä L

9! " # \$ % ÛOÄJ : @> ä h 3 Ĩ @øùj ĩ @} gèµ@SÄJ öFp; N8( L

9JavaScript Regular Expressions: @ö€Dá¨ • JavaScript ! " ; @} gèµL

9ãŸX JavaScript : h 5 Ĩ @| 5; Mĭ Î - ; Lh 5 Ĩ @• ä 9: µâ¬L

9JavaScript 2=3P: h 7 Ĩ @fœ• ä No! " ; Y\$@ÆÍ J £±DBL

9JavaScript ã ‡ ¥ \$ æ Ç: h 5.4 3@øùÎ 4; 56L