.NET String Formatting Cheat Sheet

Standard Number Format Strings [1]

SPECIFIER	NAME	FORMAT	VALUE	OUTPUT
c or C	Currency	c c4 [2]	3141.59	$3,141.59 $3,141.5900
d or D	Decimal [3]	d d6 [4]	3141	3141 003141
e or E	Scientific notation	e e4 [2]	3141.59	3.141590e+003 3.1416e+003
f or F	Fixed-point	f f1 [2]	3141.59	3141.59 3141.6
g or G	General [5]	g g2 [4] g4 [4] g6 [4]	3141.59	3141.59 3.1e+03 3142 3141.59
n or N	Number	n n4 [2]	3141.59	3,141.59 3,141.5900
p or P	Percent	p p4 [2]	3.14159	314.16 % 314.1590 %
r or R	Round-trip [6]	r r4 [7]	3141.59	3141.59 3141.59
x or X	Hexadecimal [3]	x x4 [4] X X4 [4]	31	1f 001f 1F 001F

1) Formatting is dependent upon the specified culture or the current culture if none is specified
2) The precision specifier indicates the number of digits after the decimal place
3) Throws an exception when attempting to format a non-integral value
4) The precision specifier indicates the minimum number of digits
5) The number is converted to the most compact of either fixed-point or scientific notation depending on the type and if a precision specified is specified
6) Throws an exception when attempting to format a integral value
7) The precision specifier can be present but is ignored

Custom Number Format Strings [8]

SPECIFIER	NAME	FORMAT	VALUE	OUTPUT
0	Zero placeholder	0.0 00.000	3.14159	3.1 03.142
#	Digit placeholder	#.# ##.###	3.14159	3.1 3.142
.	Decimal Point	0.###	3141.59	3141.59
,	Thousand separator and number scaling	#,# #,#, [9] #,#,, [9]	31415926	31,415,926 31,416 31
%	Percentage placeholder	0.##%	3.14159	314.16%
‰	Per mille placeholder	0.##‰ [10]	3.14159	3141.59‰
e or E	Scientific notation	0.##e0 0.##e00 [11] 0.##e+0 0.##e-0 [12]	3141.59	3.14e3 3.14e03 3.14e+3 3.14e3
		0.##e0 0.##e00 [11] 0.##e+0 0.##e-0 [12]	0.3141	3.14e-1 3.14e-01 3.14e-1 3.14e-1
;	Group separator [13]	#;(#);zero	31 -31 0	31 (-31) zero
		true;;false	0 1	false true

8) Formatting is dependent upon the specified culture or the current culture if none is specified
9) One or more number scaling specifiers (,) immediately to the left of an explicit or implicit decimal scale the number by 1000 for each specifier
10) The per mille specifier (‰) causes the number to be multiplied by 1000 before it is formatted
11) The number of zeros following the scientific notation specifier indicates the minimum number of digits for the exponent
12) The minus specifier (-) indicates that a sign should only precede negative exponents
13) The group separator specifier is used to separate sections for positive, negative, and zero numbers

Enumeration Format Strings

SPECIFIER	NAME	VALUE	OUTPUT
g or G	Default format	FileAccess.Read | FileAccess.Write	ReadWrite
f or F	Flags format	FileAccess.Read | FileAccess.Write	ReadWrite
d or D	Integer format	FileAccess.Read | FileAccess.Write	3
x or X	Hexadecimal format	FileAccess.Read | FileAccess.Write	00000003

Standard Date and Time Format Strings [14]

SPECIFIER	NAME	OUTPUT
d	Short date pattern	1/4/1975
D	Long date pattern	Saturday, January 04, 1975
f	Full date/time pattern (short time)	Saturday, January 04, 1975 8:05 PM
F	Full date/time pattern (long time)	Saturday, January 04, 1975 8:05:00 PM
g	General date/time pattern (short time)	1/4/1975 8:05 PM
G	General date/time pattern (long time)	1/4/1975 8:05:00 PM
m or M	Month day pattern	January 04
o or O	Round-trip date/time pattern	1975-01-04T20:05:00.0000000
r or R	RFC1123 pattern	Sat, 04 Jan 1975 20:05:00 GMT
s	Sortable date/time pattern	1975-01-04T20:05:00
t	Short time pattern	8:05 PM
T	Long time pattern	8:05:00 PM
u	Universal sortable date/ time pattern	1975-01-04 20:05:00Z
U	Universal full date/time pattern	Saturday, January 05, 1975 1:05:00 AM
y or Y	Year month pattern	January, 1975

14) Formatting is dependent upon the specified culture or the current culture if none is specified

Custom Date and Time Format Strings [15]

SPECIFIER	NAME	FORMAT	VALUE	OUTPUT
y	Year	yy yyyy	01-04-1975	75 1975
M	Month	M MM MMM MMMM	01-04-1975	1 01 Jan January
d	Day	d dd ddd dddd	01-04-1975	4 04 Sat Saturday
h	Hour	h hh [16]	8:05:07 PM	8 08
H	Hour (24hr format)	H HH [16]	8:05:07 PM	20 20
		H HH [16]	8:05:07 AM	8 08
m	Minute	m mm [16]	8:05:07 PM	5 05
s	Second	s ss [16]	8:05:07 PM	7 07
f	Second fractions	f ff [16]	8:05:07.06	0 06
F	Second fractions	F [17] FF [16]	8:05:07.06	 06
t	AM/PM	t tt	8:05:07 PM	P PM
z	Timezone offset	z zz zzz	8:05:07 PM	-5 -05 -05:00
K	Timezone offset	K	8:05:07 PM	-05:00
/	Date separator	M/d/yy	01-04-1975	1/4/75
:	Time separator	hh:mm tt	8:05:07 PM	08:05 PM

15) Formatting is dependent upon the specified culture or the current culture if none is specified
16) Multiple specifiers indicate the minimum number of digits to display
17) Nothing is displayed if the digit is zero