www.programming9.com

C-Programming Tutorials

Constants

N.V.Raja Sekhar Reddy

What to Discuss?

What is a Constant ?

Types of Constants in C

Integer Constants

Real Constants

Character Constants

String Constants

►

2

*www.*programming9.com

What is a Constant?

Constant is a value that cannot change during the execution of a program.

► Like variables c**onstants have data types.**

*www.*programming9.com

**Syntax**

const data\_type variable\_name;

(or) data\_type const variable\_name;

You can also define as follows

*#*define pi 3.14

*www.*programming9.com

Types of Constants in C

Integer Constants

Real Constants

Character Constants

String Constants

5

*www.*programming9.com

Integer Constants

C integer constant is a decimal, octal (Value starts with 0) or hexadecimal number (Value starts with Ox). Integer constants are always positive until you specify a negative(-) sign.

LI

**Octal Constants**

**Decimal Constants**

**HexaDecimal Constants**

**10**

012

ОХА

**1024**

02000

0x400

**12789845**

060624125

OxC32855

*www.*programming9.com

Example Program *#*include<stdio.h> void main()

{

const int a=10; *//*Decimal int const b= 01*2; 1/*Octal const int c=0xA*; //* Hexadecimal printf(" %d In %d \n %d",a,b,c);

OUTPUT: it prints 10 10 10 as output.

**LILL**

*www*.programming9.com

**Real Constants**

The default form of real constant is double and it must have a decimal point. You can represent the negative numbers in real constants. It may be in fractional form or exponential form. Ex: 3.45, -*2*.58, 0.3E-5 (equal to 0.3 x 10") Representation Value

**Type**

**TH**

**0**

0.0

double

6*.77*

6*.77*

double

**-6.0f**

float

-6.0 3.1415926536

**3.1415926536L**

long double

8

www.programming9.com

**Character Constants**

Character Constants must be enclosed with in single quotes. We use escape character along with the character. The escape character says that it is not a normal character and do something.

Symbol

"O'

b'

ASCII Character **Alert(bell) Null character Backspace Horizontal Tab New line Vertical tab Form Feed Carriage Return Single Quote** Double Quote **Backslash**

www.programming9.com

String Constants

A string constant is a sequence of characters enclosed in a double quotes.

Examples:

"*" //* Null String "programming9" *||* a full string with 12 characters "wel come" *Il s*tring with 8 characters

►

10

*www.*programming9.com

Please Like Us...

w*w*w.programming9.com

Visit us @

► https*://*w*ww.*facebook.com/groups/programming9dotcom

https*://www*.facebook.com*/*programming9

► https:*//*plus.google.com/100725294536794081179

► http*://www.*youtube.com/use*r/*nvrajasekhar?

sub\_confirmation=1

www.programming9.com