

ITP Assignment - 1

Ans 1 -> It is a file that contains the set of pre-defined standard library fns. The `#include` preprocessor directive is used to include the header file with ".h" extension in the program ex -> `stdio.h`, `string.h`, `conio.h`, `stdlib.h` etc.

Ans 2 -> Variable declaration tells compiler about data type & size of variable
-> Variable definition allocates memory to the variable

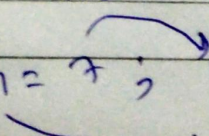
eg: -> `int i;` // Variable declaration + definition
 `extern int i;` // Variable declaration

Variable can be declared multiple times
But can only be defined once.

Ans 3 L Value:- expression that refers to a memory location.

R Value:- This term refers to a data value that is stored at some address in memory.

A R Value cannot have a value assigned to it

eg:- `int n = 7;` 
 L value R value

Ans Bitwise are operators that represent actions to be ~~performed~~ performed on single bit.

There are 6 Bitwise operators in C language.

& (and) || (or) ^ (XOR) ~ (NOT)
 \gg (shift right) \ll (shift left)

eg! $\rightarrow 7 \rightarrow 0111$ $\therefore 7/4 = 7$
 $5 \rightarrow 0101$
 $7/5 \rightarrow 0111 = 7$

we can only use Bitwise operators on int & char data types.

Ans The main() should always return an int. The execution of any program starts with main fn. and by using the main() we can find ~~whether~~ whether the program succeeded failed or generated some error. return 0 in the main fn. means the program executes successfully, return 1 in the main fn. means that the program does ~~not~~ not execute successfully & there is some error.

Ans %f \rightarrow used for decimal floating point (float data type)

%e \rightarrow Hexadecimal output in the form 0xh.hh

%g \rightarrow Convert a no. to the more compact of either scientific notation depending upon the type of number

Ans

getchar() → used to read ch. input from user
putchar() → used to print ch. input.

Ans

#include <Stdio.h>

void come (long long int a)

{ if (a < 1000)

{ printf ("%d", a)

return;

}

come (a/1000);

printf ("%d", a%1000);

}

int main ()

{ long long int a = 123456789;

come(a);

return 0;

}

Ans

No it will not work as the variable's address should be passed to the scanf. to receive value

Correct Statement :- scanf ("%d", &a);

Ans

scanf ("%s", str);