Basic Introductory Problems

(Total 15 questions)

SL	Problem statement		Difficulty levels	
1. Program that will print "Hello World".			*	
	Sample input	Sample output		
	•	Hello World		
2.	Program that will use newline/tab and print	*		
	Sample input	Sample output		
		Hello World.		
		This is my first program. C is fun.		
3.	Program that will print the following segme	nt:	*	
	Sample input	Sample output		
		The question is - "How to write a		
		\comment/ in C programming language?"		
4.	Program that will declare an integer, a floating point number, a character. Then it will initialize them with values and print those values.			
	Sample input	Sample output		
		The integer value: 5		
		The floating point value: 3.141593		
		The character value: a		
		The integer value: 100		
		The floating point value: 1.618000		
		The character value: z		
5.	Program that will do the followings:		*	
	a) Declare a variable uninitialized			
	b) Declare and initialize a variable in o	ne statement		
	c) Declare and initialize multiple variab	les with different values in one statement		
	d) Declare and initialize multiple variab	les with the same value in one statement		
6.	Program that will take your age in year(s) as	s input and print it.	*	

	Sample input	Sample output	
	20	My age is: 20	
	21	My age is: 21	
7.		e values of an integer, a floating point number, a character from	*
	the keyboard and print those values.		
	Sample input	Sample output	
	5	The integer value: 5	
	3.141593	The floating point value: 3.141593	
	A	The character value: a	
	100 1.618 z	The integer value: 100	
		The floating point value: 1.618000 The character value: z	
		The character value: 2	
8.	_	e integer numbers from keyboard but assign only the first and	**
	last inputs to variables and s	skip any assignment of the middle one.	
	Compale in most	Comple cutout	
	Sample input	Sample output	
	20 50 100	First Value = 20, Last Value = 100	
	33 75 22	First Value = 33, Last Value = 22	
9.	Program that will declare a variable from each data type: double, boolean. Then it will		*
	initialize them with values and print them.		
	Sample input	Sample output	
		The double value: 3.140000e+00	
		The boolean value: 1	
		The double value: 1.618039	
		The boolean value: 0	
10.	Program that will declare a variable from each data type: long int, long long int, long double, short int. Then it will initialize them with values and print them.		**
	Sample input		
		The long int value: 2147483647	
		The long long int value: 9223372036854775807	
		The long long int value: 9223372036854775807 The long double value: 1.1E+4932	
		The long long int value: 9223372036854775807 The long double value: 1.1E+4932 The short int value: 32767	
		The long long int value: 9223372036854775807 The long double value: 1.1E+4932 The short int value: 32767 The long int value: -2,147,483,648	
		The long long int value: 9223372036854775807 The long double value: 1.1E+4932 The short int value: 32767 The long int value: -2,147,483,648 The long long int value: -9223372036854775808	
		The long long int value: 9223372036854775807 The long double value: 1.1E+4932 The short int value: 32767 The long int value: -2,147,483,648	

Program that will declare a variable from each data type: unsigned int, unsigned long int, unsigned long long int, unsigned short int. Then it will initialize them with values and print them.		
Sample input	Sample output	
	The unsigned int value: 4294967295	
	The unsigned long int value: 4294967295	
	The unsigned long long int value: 18446744073709551615	
	he unsigned short int value: 65,535 The unsigned int value: 0	
	The unsigned int value: 0	
	The unsigned long long int value: 0	
	The unsigned short int value: 0	
Program that will define a constant using "CONST" and print the value.		**
Sample input	Sample output	
	The value of pi: 3.14	
	The value of golden ratio: 1.62	
Sample input	Sample output The value of UEICUT: 200	
	The value of HEIGHT: 200 The value of PI: 3.14	
_	ine a global and a local variable with the same name but with different he following steps in order-	**
A. Print the value of the variable before defining the local variable B. Print the value of the variable after defining the local variable C. Explicitly print the value of the variable as global		
Sample input	Sample output	
	A. Global: 10	
	B. Local: 20 C. Global: 10	
	C. Global. 10	
Program that will take function to perform t	e an floating point number as input from the keyboard and use <i>printf</i> he followings:	**

than 2 digits)

- (c) Print the number rounded to two decimal places
- (d) Print the number rounded to integer (without using conversion or type casting)
- (e) Prints the number in exponential notation/scientific notation

Sample input	Sample output
123.098	(a) Val: 123.098000
	(b) Val:123.098000
	(c) Val:123.10
	(d) Val:123
	(e) Val: 1.230980e+02