EE 1910

Dr. Johnson

Program 1

No capabilities beyond those discussed in class or in the notes are allowed

Enter and run the following program as a console program (no MSP432 needed)

```c
/*
 * programming_2.c
 *
 *  Created on: Nov 16, 2021
 *      Author: johnsontimoj
 */
///////////////////////////////////
//
// Programming HW #1
//
// rev 0
//
///////////////////////////////////
//
// Program to do some printing
//
///////////////////////////////////

// a comment starts with a double slash and goes to the end of the line

// this line adds in our printf() and scanf() functions
#include <stdio.h>                    // only needed when printing

// the format for our "main" function is
// int main(void){
// the curly braces operate like parenthesis to collect things together
int main(void){
    // this line is required - more on why later
    setbuf(stdout, NULL);

    // to print out text - you place the text inside double quotes, inside the printf() function
    // note: \n causes a new line to be printed
    // splash
    printf("\n\nProgramming HW 1\n");
    printf("Welcome to my printing program\n\n");

    // create some variables to print out later
    // the format is: type of variable followed by the name of the variable
    int var1;           // an integer - whole number
    int var2;
    float var3;         // a floating point number - any number with a decimal point
    float var4;

    // give the variables some values
    // the format is: variable_name = value
    // the = is called an assignment
    // we say variable_name is assigned the value value
    var1 = 3;
    var3 = 2.5;
    // note var2 and var4 have not been given values yet
```
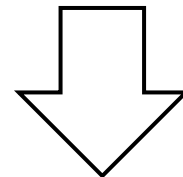
Enter and run the following program as a console program (no MSP432 needed)

```c
// ask the user to provide a value for a variable
// the process is to ask for an input (printf) followed
//   by reading in a value (scanf)

// ask for and read in an integer
// scanf needs to know what kind of value you are giving it
// format is: ("%type", &variable) inside the scanf() function
// types are i for int, f for float
printf("Please enter an integer value for var2: ");
scanf("%i", &var2);

printf("Please enter a float value for var4: ");
scanf("%f", &var4);

// print out the values
// format is: ("%type", variable) inside the printf() function
// note: & is not used in the printf()
printf("%i\n", var1);
printf("%f\n", var3);

// We can include text in our printf function
// just place it in the double quotes along with the format information
printf("Var 2 has the value %i\n", var2);
printf("%f is the value of var4\n", var4);

// we always end our main function with a return
// it is traditional to return a 0 if nothing went wrong
return 0;
}// end main
```
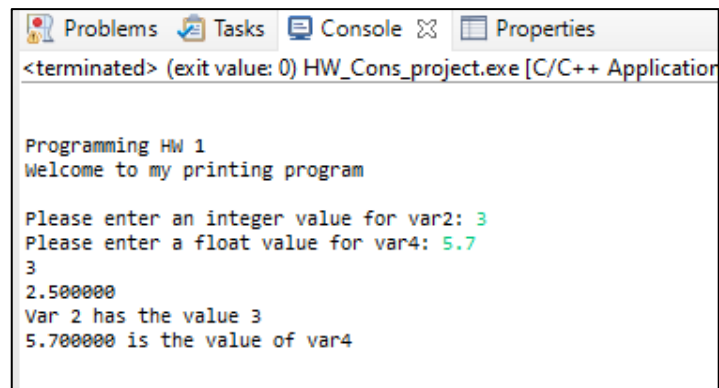
```
Problems  Tasks  Console ⊠  Properties
<terminated> (exit value: 0) HW_Cons_project.exe [C/C++ Application


Programming HW 1
Welcome to my printing program

Please enter an integer value for var2: 3
Please enter a float value for var4: 5.7
3
2.500000
Var 2 has the value 3
5.700000 is the value of var4
```