1) (10 Points)
Write a complete ANSI-C program that calls the function MySign( x ), specified below.

a) Your complete ANSI-C program must call your MySign function with a value of -123.45. Store the value returned by the function in a suitable (local) variable. (4 pts)

b) Write your own C-function called MySign( x ), where its argument, x, is of type double. The function returns the following integer values:
   - if x > 0, the function returns +1;
   - if x < 0, the function returns -1;
   - if x is exactly 0, the function returns 0.
Write the entire function, including function prototype, header, body and return statement using the appropriate variable types as specified above. (6 pts)

You are not allowed to use global variables in your program or function though you may use as many or as few additional local variables as you consider necessary.

Final Note: in your program (or function) do **not** include any input or output statements such as `scanf` or `printf` or any include files. You will be graded on program logic and syntax mistakes.

Solution:

```c
int MySign( double x);  //function MySign prototype

main()  //main
{
  int y;  // local variable
  y = MySign( 123.45);  // MySign function call
}

int MySign( double x)  // MySign function header
{
  int y = 0;  // MySign function body
  if( x > 0)  // local variable declaration & init.
    y = 1;
  if( x < 0 )  // check for positive values
    y = -1;
  return y;  // NOTE: x == 0 is implicitly handled
              // when both if statements are false!
```