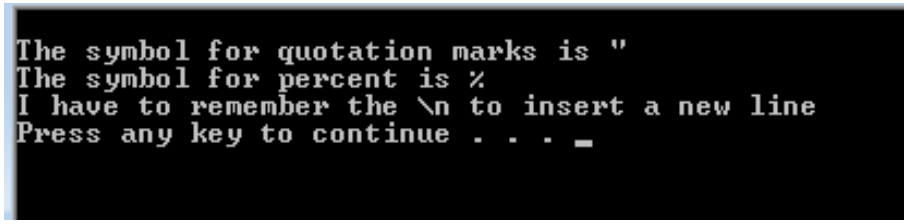
```c
//Escape sequences

#include <stdlib.h>
#include <stdio.h>

int main()
{
    printf("\nThe symbol for quotation marks is \"\nThe symbol for percent is %%\nI have to remember the \\n to insert a new line\n");

}
```



Practice Problem

Write a program that:

1. Declares four double variables: x, y, u, v
2. Declares one char variable (Letter)
3. Assigns x=5
4. Prints “I like C” to the screen
5. Assigns a value to y (y=2x)
6. Prints the values of x and y
7. Requests values of u and v from user
8. Prints values of u and v
9. Requests user’s favorite letter
10. Prints “You entered the letter *Letter*”

```c
/* Practice problem 1 */
#include <stdio.h>
#include <stdlib.h>

void main()
{
    //Declare variables
    double x = 5, y, u, v;
    char Letter;

    /*print output to the screen */
    printf("I like C\n");

    /*Assign a value and print to screen */
    y = 2 * x;
    printf("\nThe values are x = %lf and y = %lf\n\n", x, y);

    /*Get values from user and print to screen */
    printf("\nPlease enter a value for u:\n\n");
    scanf("%lf", &u);
    printf("\nPlease enter a value for v:\n\n");
    scanf("%lf", &v);
    printf("\nThe values are u = %lf and v = %lf\n\n", u, v);
    printf("\nWhat is your favorite letter: ");
    scanf(" %c", &Letter);
    printf("\n\nYou entered the letter: %c\n\n", Letter);

}
```

Practice Problem

```
Please enter a number for bananas:
2
Please enter a number for oranges:
3
Please enter a number for grapes:
4
Please enter the first letter of your first name:
i

apples = 5, bananas = 2

oranges = 3.000000, grapes = 4.000000

First Letter = i

Pi = 3.141560

This was fun!

Press any key to continue . . .
```

Write a program that will do the following:

1. Declare 2 integer variables: apples, bananas
2. Set apples equal to 5
3. Declare 2 double variables: oranges, grapes
4. Declare one character variable: FirstLetter
5. Use #define to create a variable PI equal to 3.14156
6. Ask user to provide values for bananas, oranges, and grapes
7. Ask user to provide the first letter of his/her first name
8. Display the variables and text as shown in the output

```c
#include <stdlib.h>
#include <stdio.h>

 #define PI 3.14156  //Declaring variable PI using #define

int main()
{
    //Declare integer variables
    int apples = 5, bananas;

    //Declare double variables
    double oranges, grapes;

    //Declare character variable
    char FirstLetter;

    //Ask for user inputs
    printf("Please enter a number for bananas:\n");
    scanf("%d", &bananas);

    printf("Please enter a number for oranges:\n");
    scanf("%lf", &oranges);

    printf("Please enter a number for grapes:\n");
    scanf("%lf", &grapes);

    printf("Please enter the first letter of your first name:\n");
    scanf(" %c", &FirstLetter);

    //Display variables
    printf("\n\napples = %d, bananas = %d", apples, bananas);
    printf("\n\noranges = %lf, grapes = %lf", oranges, grapes);
    printf("\n\nFirst Letter = %c", FirstLetter);
    printf("\n\nPi = %lf", PI);
    printf("\n\nThis was fun!\n\n");


}
```