```c
#include<stdio.h>
int main()
{
        /*as a general practice, it is recommended to put all the
        variable declarations in the beginning of the code*/

        int a; //int variable
        char c; // char variable
        float f; //float variable
        double d; //double variable
        int p, q, r; //multiple declarations
        /* int p, char q; invalid declaration*/


        printf("%s", "Hello world!\n"); //print "Hello world!" on the
console

        //initialising a variable within the code
        a = 6;
        c = 'p';

        //initialising a variable by taking input from user
        printf("Enter the value of p: ");
        scanf("%d", &p);
        printf("%d\n%c\n", p, c); //print the value


}
```