

## Letter Guess

One of the simplest games is represented here. It's a game that's so simple it hardly needs an introduction. A letter is picked and with every guess you are given clues as to whether the hidden letter is higher or lower than your guess. For this sort of game the best strategy can be called "divide and conquer." By choosing points as close to the middle of where the letter could possibly be to win in the least number of guesses. If it takes you 7 guesses you're taking too long.

Letter Guess is inspired by the BASIC Game 'Letter' written by Bob Albrecht as found in 'BASIC Computer Games' edited by David H Ahl © 1978.

LETTERGUESS.C	You will need: a C/C++ compiler .
<pre>#include &lt;stdio.h&gt; #include &lt;stdlib.h&gt; #include &lt;time.h&gt; #include &lt;ctype.h&gt;  int main (void) {     char input, goal;     int num;      srand(time(NULL));     printf ("Guess My Letter Game\n\n");     do {         goal = rand() % 26 + 'A';         num = 0;         printf ("I have a letter between A and Z.\n");         do {             num ++;             printf ("Guess #%d (A - Z) : ", num);             do input = getchar (); while (!isalpha (input));             input = toupper (input);             if (input != goal) {                 printf ("\nNo, my letter comes ");                 if (input &lt; goal) printf ("AFTER");                 else printf ("BEFORE");                 printf (" your guess.\n");             }         } while (input != goal);         printf ("\nYou got it! It took you %d tries to guess my letter.\n", num);         if (num &gt;= 4) printf ("I'm sure you could do better, though.\n");         printf ("\nDo you want to play again? (y/n) ");         do input = getchar (); while (!isalpha (input));     } while ((input == 'y')    (input == 'Y'));     printf ("\nGoodbye.\n");     exit (0); }</pre>	

### Author's Notes:

If you're inexperienced in programming this is an excellent example of conditional statements in a program like do/while or if/else. Those commands alone can be all you need to write a program, tho eventually you'll need to expand your C/C++ vocabulary to include while, for, and case statements.