#include<iostream>

#include<fstream>

#include<string>

#include<cstdlib> //Required for srand(), rand().

#include<ctime>

#include <iomanip> //setw()

using namespace std;

//int MAX(100);

int main(){

int i,c=0,m=0, b=0, count=7, type, l, y=0, temp=0, AI[100], ai=0, num, tempai=0,brake, win=0, skip=0;

char guess[100], \*n, word[100], space, \*x, blank[100], letter, alph;

char \*library[] = {"telescope", "automobile", "generator"};

char alphabet[26] = {'a', 'b', 'c', 'd', 'e', 'f', 'g', 'h', 'i', 'j', 'k', 'l', 'm', 'n',

'o', 'p', 'q', 'r', 's', 't', 'u', 'v', 'w', 'x', 'y', 'z'};

string name;

//Introduction

cout << setw(50) << "Welcome to HANGMAN!!!" << endl;

cout << setw(51) << "\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_" << endl;

cout << endl;

cout << "Tell me, player, what is your name?" << endl;

cin >> name;

cout << endl << endl;

cout << "Well, " << name << ", below is a word that you must decipher before the AI player does." << endl;

cout << "Guess individual letters, or the whole word." << endl;

cout << "If you guess wrong 7 times, however, you lose." << endl;

cout << "You will alternate turns with the AI... you first." << endl;

//randomize word pick from library array

srand((unsigned)time(NULL));

i=rand()%(2+1);

n=library[i];

cout << i << n << endl;

x=n;

space=\*n;

word[0]=space;

//cout << word[c] << endl;

while(\*n!='\0'){

c++;

space=\*(++n);

word[c]=space;

//cout << word[c] << endl;

m++;

}

brake=m;

//cout << m << endl;

cout << endl << endl << endl;

cout << "Here is your word..." << endl << endl;

for(b=0; b<m; b++){

blank[b]='\_';

cout << blank[b] << ' ';

}

cout << endl << endl << endl;

while(count != 0){

cout << endl;

cout << "would you like to guess a word(0) or a letter(1)?" << endl;

cin >> type;

cout << endl;

switch(type){

case(0):

cout << "What do you think the word is, " << name << "?" << endl;

cin >> guess;

if(strcmp(guess,x)==0){

cout << "CORRECT!" << endl;

}

else{

cout << "Sorry, '" << guess << "', is not the word." << endl;

count--;

}

break;

case(1):

cout << "Guess a letter..." << endl;

cin >> letter;

for(l=0;l<m;l++){

if(word[l]==letter){

blank[l]=word[l];

y++;

temp++;

}

}

cout << endl << endl;

if(temp==1){

cout << "YES! There is " << temp << " " << letter << " in the word!" << endl;

}

if(temp>1){

cout << "YES! There are " << temp << " " << letter << "'s in the word!" << endl;

}

if(temp==0){

cout << "Sorry, there are no " << letter << "'s in the word..." << endl;

count--;

}

if(y==brake){

win=1;

}

break;

default:

cout << "Please input a 0 or 1..." << endl;

break;

}

temp=0;

if(y==brake){

break;

}

cout << endl;

for(b=0; b<m; b++){

cout << blank[b] << ' ';

}

cout << endl << count << " chances remain." << endl;

cout << endl << "The AI will now take it's turn." << endl;

AI[ai]=rand()%(25+1);

num = AI[ai];

alph=alphabet[num];

ai++;

cout << "The AI's letter guess is " << alph << endl;

for(b=0; b<m; b++){

if(blank[b]==alph){

cout << "That letter has already been attempted. Skipping turn." << endl;

skip=1;

}

}

if(skip==0){

for(l=0;l<m;l++){

if(word[l]==alph){

blank[l]=word[l];

y++;

tempai++;

}

}

cout << endl << endl;

if(tempai==1){

cout << "YES! AI, There is " << tempai << " " << alph << " in the word!" << endl;

}

if(tempai>1){

cout << "YES! AI, There are " << tempai << " " << alph << "'s in the word!" << endl;

}

if(tempai==0){

cout << "Sorry, AI, there are no " << alph << "'s in the word..." << endl;

}

tempai=0;

for(b=0; b<m; b++){

cout << blank[b] << ' ';

}

}

skip = 0;

if(y==brake){

break;

}

cout << endl << "Back to you, " << name << ". " << y<< endl;

}

cout << endl << "The word has been solved!" << endl;

if(win==1){

cout << "Congratulations, " << name << ", you won!!!" << endl;

}

else{

cout << "Sorry, " << name << ", the AI beat you. Better luck nect time." << endl;

}

/\*z=\*n;

fph[0]=z;

cout << fph[0] << endl;

z=\*(++n);

fph[1]=z;

cout << fph[1] << endl;\*/

return 0;

}