MASTERMIND PROJECT

TEAM:CODESMILE4

MEMBERS: N.ARUTKEERTHI(TEAM LEADER-ENROLLMENT NUMBER:20311016)

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**SOURCE CODE**::

//CODESMILE4 20311016(captain) Project-Game-Black and white

#include<iostream.h>

#include<conio.h>

#include<string.h>

#include<iomanip.h>

#include<ctype.h>

#include<fstream.h>

#include<studio.h>

#include<process.h>

#include<stdlib.h>

struct user

{

char ch;

int B,W;

}

void mastermind()

{

fstream f;

f.open("words.txt",ios::in|ios::out|ios::trunc);

char a6[1000]={"abroad battle country domain equity famous growth honest inquiry junior killed lesson mother notice option parent quotes regard silent talent united vision winter yellow"};

char a7[1000]={"absence barking chamber drought english finally glitter hormone indians janitor kindman lazying monster naughty october physics rampage sweater thirsty uranium"};

char a8[1000]={"absolute bearable campaign dockyard enclosed footstep gymnasts hardened isolated jammable knockout landmark musician national overworn painting quotient raisings sympathy tactical urbanise vehicles websites youthful"};

char a9[1000]={"adversity betrayals configure devouring exploring farmhouse goldsmith hypocrite introduce jubilant lecturing mastering numerical published randomise symbolise uniformly voluntary wonderful youngster"};

char a10[1000]={"astonished boundaries charmingly determined exhaustion formidable importance journalism longitudes magnitudes nightmares sympathise trampoline ultrasonic vanquished worshipful"};

randomize();

int n=random(110);

f<<a6<<a7<<a8<<a9<<a10;

char temp[10];

f.seekg(0);

for(int i=0;i<n;i++)

{

f.getline(temp,11,' ');

}

char m[10];

strcpy(m,temp);

int l;

l=strlen(m);

user word[10];

int y=0,w,b,k=0,t;

float cnt=0;

char u[10];

cout<<"Press an other key."<<endl;

getch();

clrscr();

cout<<endl<<"Let us get started!The hidden word has "<<l<<" letters!"<<endl;

cout<<"Enter a word with :<<l<<" letters!"<<endl;

gets(u);

while(k==0)

{

if(strlen(u)==l)

{

y=0;

for(int i=0;i<strlen(u);i++)

{

if(isalpha(u[i]))

y++;

}

if(strcmpi(u,m)==0)

{

k=1;

break;

}

else if(y==l)

{

for(i=0;i<l;i++)

{

word[i].ch=u[i];

word[i].B=0;

word[i].W=0;

}

for(i=0;i<l;i++)

{

for(int j=0;j<l;j++)

{

if(m[i]==word[j].ch)

{

if(i==j)

{

word[j].W=1;

word[j].B=0;

}

else if(word[j].W==0)

word[j].B=1;

}

}

}

b=0;

w=0;

for(i=0;i<l;i++)

{

w=w+word[i].W;

b=b+word[i].B;

}

if(b>=l/2||w>=l/2)

cnt++;

cout<<endl;

cout<<endl<<"There are "<<b<<" blacks and "<<w<<" whites"<<endl;

cout<<endl<<"Enter the next word you are guessing"<<endl;

gets(u);

}

else

{

cout<<"Sorry you have entered a word with special characters"<<endl

cout<<"Enter again"<<endl;

gets(u);

}

}

else

{

cout<<"Sorry youhave entered a word with no. of letters not matching with that of the hidden word"<<endl;

cout<<"Enter again"<<endl;

gets(u);

}

}

if(k==1)

{

cout<<endl<<"You have arrived at the right word!"<<endl<<"The right word is "<<m;

}

int x,z;

x=cnt+1;z=1;

if(x<=z)

cout<<endl<<"You seem to have an iq above average,about 115-130"<<endl;

else if(x>z&&x<=5\*z/2)

cout<<endl<<"You seem to have an average iq between 85-115"<<endl;

else if(x>5\*z/2)

cout<<endl<<"You seem to have an iq below average,below 85"<<endl;

cout<<"- - - - - -- -- - -- - - - - - - - - - - - - - - - - - - - - --- ------ ------ - - - - - -"<<endl;

cout<<"Disclaimer::The iq we have predicted ,may not be right"<<endl;

cout<<endl;

cout<<"Thank you for playing our game"<<endl;

cout<<endl;

cout<<"-------------------------------------------------------------------------------------------"<<endl;

}

void main()

{

getch();

clrscr();

int n;

cout<<setfill('-')<<setw(80)<<" "<<endl;

cout<<setfill('-')<<setw(80)<<" "<<endl;

cout<<setw(45)<<"MASTER MIND"<<endl;

cout<<setfill('-')<<setw(80)<<" "<<endl;

cout<<setfill('-')<<setw(80)<<" "<<endl;

cout<<"->Int this game a word in random from the dictionary is chosen.(press any key)"<<endl;

getch();

cout<<endl;

cout<<"->You are told how many letters exist in the hidden word(Press key)"<<endl;

getch();

cout<<endl;

cout<<"->You enter a word with the same number of letters and try to get the hidden word"<<endl;

cout<<endl;

cout<<endl;

cout<<"Type 1 to know the game rules,type anything else if no"<<endl;

cout<<endl;

cout<<"----------------------------------------------------------------------------------------"<<endl;

char ch;

cin>>ch;

if(ch=='1')

{

cout<<"Press key"<<endl;

getch();

clrscr();

cout<<endl;

cout<<"----------------------------Rules!!!-------------------------------"<<endl

cout<<" 1)Enter a word with only that many letters present in hidden word"<<endl;

cout<<" 2)Enter only words containing letters(no special characters)"<<endl;

cout<<" 3)Enjoy using you Brain!"<<endl;

cout<<" At the end we would also try to approximate your iq based on how many attempts you took to find the word"<<endl;

}

cout<<"Press key"

getch();

clrscr();

cout<<"Do you want see reference?"<<endl;

cout<<"Enter 1 to continue or anything else to skip"<<endl;

cout<<"-----------------------------------------------------"<<endl;

cin>>ch;

if(ch=='1')

{

cout<<endl;

cout<<"->For every word you enter no. of blacks and whites in that word is shown."<<endl;

cout<<endl;

cout<<"Press key"<<endl;

getch();

cout<<"1)No. of blacks=No. of letters in ur word which exists in the hidden word but positions of the similar letters in ur word don't match with that of the hidden"<<endl;

cout<<endl;

cout<<"2)No. of whites=No. of letters in you word existing in hidden word,and positions of similar letters are also same!"<<endl;

cout<<endl;

cout<<"Press key"<<endl;

getch();

clrscr();

cout<<"Do you want a demo?(Type 1 if yes)"<<endl;

cin>>ch;

}

if(ch=='1')

{

cout<<"-----------------------------------------------"<<endl;

cout<<"For example:Let us assume hidden word to be 'Banana'"<<endl;

cout<<endl;

cout<<"->You enter the word taught"<<endl;

cout<<"Now the owrd banana and taught have 'a' as common and positions of a also match"<<endl;

cout<<"thus now you have one white,zero blacks"<<endl;

cout<<endl;

getch();

cout<<"->Next you enter 'leader'"<<endl;

cout<<"Now 'a' is common but positions don't match"<<endl;

cout<<"Thus one black,zero whites"<<endl;

getch();

clrscr();

cout<<endl<<"This way you can try different combinations to find the hidden word"<<endl;

cout<<"-------------------------------------------------------------------------------"<<endl;

cout<<endl;

}

cout<<"Would you like to play?Enter 1"<<endl;

cout<<endl;

cin>>n;

if(n==1)

mastermind();

else

exit(0);

int c;

for(int i=5;i>0;i++)

{

clrscr();

cout<<"Would you like to play again?Enter 1"<<endl;

cin>>c;

if(c==1)

mastermind();

else

exit(0);

}

getch();}

**OUTPUT:**

- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

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MASTERMIND

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->In this game a word in random from the dictionary is chosen.(press any key)"

->You enter a word with the same number of letters and try to get the hidden word

Type 1 to know the game rules,type anything else if no

1

Press key

----------------------------Rules!!!-------------------------------

1)Enter a word with only that many letters present in hidden word

2)Enter only words containing letters(no special characters)

3)Enjoy using you Brain!

At the end we would also try to approximate your iq based on how many attempts you took to find the word

Press key

Do you want see reference?

Enter 1 to continue or anything else to skip

1

->For every word you enter no. of blacks and whites in that word is shown.

1)No. of blacks=No. of letters in ur word which exists in the hidden word but positions of the similar letters in ur word don't match with that of the hidden

2)No. of whites=No. of letters in you word existing in hidden word,and positions of similar letters are also same!

Do you want a demo?(Type 1 if yes)

1

For example:Let us assume hidden word to be 'Banana'

->You enter the word taught

Now the word banana and taught have 'a' as common and positions of a also match

thus now you have one white,zero blacks

->Next you enter 'leader'

Now 'a' is common but positions don't match

Thus one black,zero whites

This way you can try different combinations to find the hidden word

Would you like to play?Enter 1

1Press some key

Let us get started!The hidden word has 6 letters!

Enter a word with :6 letters!

Worlds

There are 1 blacks and 0 whites

Enter the next word you are guessing

Apples

There are 2 blacks and 1 white

Enter the next word you are guessing

English

You have arrived at the right word!

The right word is english

You seem to have an iq above average,about 115-130

Disclaimer::The iq we have predicted ,may not be right

Thank you for playing our game

Would you like to play again?Enter 1

2