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***Name* :-** Abrar Mahedavi

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***Title* :-** Write a program to form a dictionary to store keywords and its meanings. Provide facility to add,delete and update new entries.

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***Program :***

#include<iostream>

#include<string.h>

using namespace std;

class Element //Declaration of Class

{

public:

char key[10];

char meaning[30];

void read()

{

cin>>key;

}

void readkey()

{

cin>>meaning;

}

void display()

{

cout<<"Word:-\t"<<key<<"\n ";

cout<<"Meaning:-\t"<<meaning<<"\n";

}

};

class Dictionary //Declaration of Class

{

int size;

Element keys[50];

public:

Dictionary()

{

size=0;

}

void create(); //Prototype for create function void delete\_element(); //Prototype for delete\_element function void insert(); //Prototype for insert function

void modify(); //Prototype for modify function void search(); //Prototype for search function void display\_list(); //Prototype for display\_list function };

void Dictionary :: create() //Function Definition for create {

int n;

cout<<"Enter the number of words:-\t";

cin>>n;

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

{

cout<<"Enter the word:-\t";

keys[i].read();

cout<<"Enter the meaning:-\t";

keys[i].readkey();

cout<<endl;

++size;

}

}

void Dictionary :: delete\_element() //Function Definition for delete\_element

{

int n;

cout<<"Enter the position of the word u wish to delete:-\t";

cin>>n;

if(n>size)

{

cout<<"Invalid number...No word at this position\n";

}

for(int i=n-1;i<size;i++)

{

keys[i]=keys[i+1];

}

--size;

}

void Dictionary :: insert()//Function Definition for insert

{

int n;

cout<<"Enter the position of the word u wish to insert:-\t";

cin>>n;

if(n>(size+2))

{

cout<<"Invalid number...Cannot leave empty spaces in the list\n";

}

n--;

for(int i=size;i>=n;i--)

{

keys[i+1]=keys[i];

}

cout<<"Enter the word:-\t";

keys[n].read();

cout<<"Enter the meaning:-\t";

keys[n].readkey();

cout<<endl;

size++;

}

void Dictionary :: display\_list() //Function Definition for display\_list

{

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

{

cout<<i+1<<".";

keys[i].display();

cout<<endl;

}

}

void Dictionary :: modify()//Function Definition for modify

{

char ch[20];

int i=0;

cout<<"Enter the word you wish to modify:-\t";

cin>>ch;

while(i<size)

{

if(!strcmp(ch,keys[i].key))

{

cout<<"Enter the meaning for the word:-\t";

keys[i].readkey();

break;

}

i++;

}

}

void Dictionary :: search()

{

char ch[20];

int i=0;

int flag=0;

cout<<"Enter the word you wish to search:-\t";

cin>>ch;

while(i<size)

{

if(!strcmp(ch,keys[i].key))

{

cout<<"Word found at position:-\t";

cout<<i+1<<endl;

cout<<"Meaning:-\t"<<keys[i].meaning<<endl;

flag=1;

break;

}

i++;

}

if(flag==0)

{

cout<<"Word not fund in the list.\n\n";

}

}

int main()

{

Dictionary d;

int choice=0;

int op=0;

cout<<"\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*DICTIONARY\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\n";

do

{

cout<<"\n------------------------------------------------------------------\n\n";

cout<<"Enter your choice "<<endl;

cout<<"1.Create word."<<endl;

cout<<"2.Delete word."<<endl;

cout<<"3.Display entire list"<<endl;

cout<<"4.Insert"<<endl;

cout<<"5.Modify"<<endl;

cout<<"6.Search"<<endl;

cout<<"7.Exit"<<endl;;

cin>>choice;

switch(choice){

case 1: d.create();

break;

case 2: d.delete\_element();

break;

case 3: d.display\_list();

break;

case 4: d.insert();

break;

case 5: d.modify();

break;

case 6: d.search();

break;

case 7: cout<<"\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*THANKYOU\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\n\n"; break;

default: cout<<"Wrong input\n\n";

}

}

while(choice!=7);

return 0;

}

***Output :***

hayat@ubuntu:~/Downloads$ g++ Dictionary.cpp

hayat@ubuntu:~/Downloads$ ./a.out

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*DICTIONARY\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

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

Enter your choice

1.Create word.

2.Delete word.

3.Display entire list

4.Insert

5.Modify

6.Search

7.Exit

2

Enter the position of the word u wish to delete:- **1**

**Invalid number...No word at this position**

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

Enter your choice

1.Create word.

2.Delete word.

3.Display entire list

4.Insert

5.Modify

6.Search

7.Exit

**1**

Enter the number of words:- 4

Enter the word:- Computer

Enter the meaning:- Device

Enter the word:- Mobile

Enter the meaning:- Cellphone

Enter the word:- Potato

Enter the meaning:- Vegetable

Enter the word:- Apple

Enter the meaning:- Fut

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

Enter your choice

1.Create word.

2.Delete word.

3.Display entire list

4.Insert

5.Modify

6.Search

7.Exit

**3**

1.Word:- Computer

Meaning:- Device

2.Word:- Mobile

Meaning:- Cellphone

3.Word:- Potato

Meaning:- Vegetable

4.Word:- Apple

Meaning:- Fut

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

Enter your choice

1.Create word.

2.Delete word.

3.Display entire list

4.Insert

5.Modify

6.Search

7.Exit

**4**

Enter the position of the word u wish to insert:- **2**

Enter the word:- Cat

Enter the meaning:- Animal

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

Enter your choice

1.Create word.

2.Delete word.

3.Display entire list

4.Insert

5.Modify

6.Search

7.Exit

**3**

1.Word:- Computer

Meaning:- Device

2.Word:- Cat

Meaning:- Animal

3.Word:- Mobile

Meaning:- Cellphone

4.Word:- Potato

Meaning:- Vegetable

5.Word:- Apple

Meaning:- Fut

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

Enter your choice

1.Create word.

2.Delete word.

3.Display entire list

4.Insert

5.Modify

6.Search

7.Exit

**5**

Enter the word you wish to modify:- **Apple**

Enter the meaning for the word:- **Fruit**

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

Enter your choice

1.Create word.

2.Delete word.

3.Display entire list

4.Insert

5.Modify

6.Search

7.Exit

**3**

1.Word:- Computer

Meaning:- Device

2.Word:- Cat

Meaning:- Animal

3.Word:- Mobile

Meaning:- Cellphone

4.Word:- Potato

Meaning:- Vegetable

5.Word:- Apple

Meaning:- Fruit

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

Enter your choice

1.Create word.

2.Delete word.

3.Display entire list

4.Insert

5.Modify

6.Search

7.Exit

**2**

Enter the position of the word u wish to delete:- **3**

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

Enter your choice

1.Create word.

2.Delete word.

3.Display entire list

4.Insert

5.Modify

6.Search

7.Exit

**3**

1.Word:- Computer

Meaning:- Device

2.Word:- Cat

Meaning:- Animal

3.Word:- Potato

Meaning:- Vegetable

4.Word:- Apple

Meaning:- Fruit

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

Enter your choice

1.Create word.

2.Delete word.

3.Display entire list

4.Insert

5.Modify

6.Search

7.Exit

**6**

Enter the word you wish to search:- **Potato**

Word found at position:- **3**

Meaning:- **Vegetable**

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

Enter your choice

1.Create word.

2.Delete word.

3.Display entire list

4.Insert

5.Modify

6.Search

7.Exit

**6**

Enter the word you wish to search:- **Mobile**

**Word not fund in the list.**

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

Enter your choice

1.Create word.

2.Delete word.

3.Display entire list

4.Insert

5.Modify

6.Search

7.Exit

**7**

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*THANKYOU\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***