**Practical No:13**

**PROGRAM:**#include <iostream>

#define max 20

using namespace std;

struct employee

{

string name;

long int code;

string designation;

int exp;

int age;

};

int num;

employee emp[max];

void showMenu();

void build()

{

cout << "\nBuild The Table\n";

cout << "Maximum Entries can be " << max << "\n";

cout << "Enter the number of entries required: ";

cin >> num;

if (num > max) {

cout << "Maximum number of entries is 20\n";

num = max;

}

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

{

cout << "\nEntry " << i + 1 << ":\n";

cout << "Name: ";

cin >> emp[i].name;

cout << "Employee ID: ";

cin >> emp[i].code;

cout << "Designation: ";

cin >> emp[i].designation;

cout << "Experience (years): ";

cin >> emp[i].exp;

cout << "Age: ";

cin >> emp[i].age;

}

showMenu();

}

void insert()

{

if (num < max)

{

int i = num;

num++;

cout << "\nEnter the information of the new Employee:\n";

cout << "Name: ";

cin >> emp[i].name;

cout << "Employee ID: ";

cin >> emp[i].code;

cout << "Designation: ";

cin >> emp[i].designation;

cout << "Experience (years): ";

cin >> emp[i].exp;

cout << "Age: ";

cin >> emp[i].age;

}

else

{

cout << "\nEmployee Table Full\n";

}

showMenu();

}

void deleteIndex(int i)

{

for (int j = i; j < num - 1; j++)

{

emp[j] = emp[j + 1];

}

}

void deleteRecord()

{

cout << "\nEnter the Employee ID to delete record: ";

int code;

cin >> code;

bool found = false;

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

{

if (emp[i].code == code)

{

deleteIndex(i);

num--;

found = true;

cout << "Record deleted successfully.\n";

break;

}

}

if (!found)

{

cout << "Employee ID not found.\n";

}

showMenu();

}

void searchRecord()

{

cout << "\nEnter the Employee ID to search: ";

int code;

cin >> code;

bool found = false;

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

{

if (emp[i].code == code)

{

cout << "\nRecord Found:\n";

cout << "Name: " << emp[i].name << "\n";

cout << "Employee ID: " << emp[i].code << "\n";

cout << "Designation: " << emp[i].designation << "\n";

cout << "Experience: " << emp[i].exp << " years\n";

cout << "Age: " << emp[i].age << "\n";

found = true;

break;

}

}

if (!found)

{

cout << "Employee ID not found.\n";

}

showMenu();

}

void showMenu()

{

int option;

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

cout << "Employee Management System\n";

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

cout << "\nAvailable Options:\n";

cout << "1. Build Table\n";

cout << "2. Insert New Entry\n";

cout << "3. Delete Entry\n";

cout << "4. Search a Record\n";

cout << "5. Exit\n";

cout << "Enter your choice: ";

cin >> option;

switch (option)

{

case 1:

build();

break;

case 2:

insert();

break;

case 3:

deleteRecord();

break;

case 4:

searchRecord();

break;

case 5:

cout << "Exiting Program.\n";

return;

default:

cout << "Invalid option. Please select between 1-5.\n";

showMenu();

}

}

int main()

{

showMenu();

return 0;

}

**OUTPUT:**-------------------------

Employee Management System

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

Available Options:

1. Build Table

2. Insert New Entry

3. Delete Entry

4. Search a Record

5. Exit

Enter your choice: 1

Build The Table

Maximum Entries can be 20

Enter the number of entries required: 2

Entry 1:

Name: Abc

Employee ID: 123

Designation: manager

Experience (years): 01

Age: 22

Entry 2:

Name: DFE

Employee ID: 456

Designation: qewy

Experience (years): 10

Age: 35

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

Employee Management System

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

Available Options:

1. Build Table

2. Insert New Entry

3. Delete Entry

4. Search a Record

5. Exit

Enter your choice: 2

Enter the information of the new Employee:

Name: poi

Employee ID: 789

Designation: tryu

Experience (years): 2

Age: 23

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

Employee Management System

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

Available Options:

1. Build Table

2. Insert New Entry

3. Delete Entry

4. Search a Record

5. Exit

Enter your choice: 3

Enter the Employee ID to delete record: 123

Record deleted successfully.

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

Employee Management System

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

Available Options:

1. Build Table

2. Insert New Entry

3. Delete Entry

4. Search a Record

5. Exit

Enter your choice: 4

Enter the Employee ID to search: 456

Record Found:

Name: DFE

Employee ID: 456

Designation: qewy

Experience: 10 years

Age: 35

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

Employee Management System

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

Available Options:

1. Build Table

2. Insert New Entry

3. Delete Entry

4. Search a Record

5. Exit

Enter your choice: 5

Exiting Program.