/\* B25CE2007

Develop a program in C++ to create a database of an employee's information system containing the following fields: Name, employee ID, Department, Date of Joining,Contact address, Telephone number etc. Construct the database with suitable member functions to accept and print employee details. Make use of constructor types, destructor, static members, inline function and dynamic memory allocation using operators-new and delete.

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#include <iostream> #include <string> using namespace std;

class Employee

{

string name; int empID;

string department; string address; string phone;

int day, month, year;

public:

static int count; // static counter

// Inline welcome message inline void welcome()

{

cout << "\n--- Welcome to Employee Management System ---\n";

}

// Default Constructor Employee()

{

cout << "Default Constructor Block\n"; name = "Unknown";

empID = 0; department = "NA";

address = "NA";

phone = "0000000000";

day = month = year = 0; count++;

}

// Parameterized Constructor

Employee(string n, int id, string dept, string addr, string ph, int d, int m, int y)

{

cout << "Parameterized Constructor Block\n"; name = n;

empID = id; department = dept; address = addr; phone = ph;

day = d; month = m; year = y; count++;

cout << "The employee no is: " << count << endl;

}

// Copy Constructor Employee(const Employee &E)

{

cout << "Copy Constructor Block\n"; name = E.name;

empID = E.empID; department = E.department; address = E.address; phone = E.phone;

day = E.day; month = E.month; year = E.year; count++;

cout << "The employee no is: " << count << endl;

}

// Destructor

~Employee()

{

cout << "Destructor called for Employee: " << name << endl; count--;

}

// Setter for name

void setName(const string& n)

{

name = n;

}

// Accept details from user void accept()

{

cout << "Enter Name: "; getline(cin >> ws, name);

cout << "Enter Telephone No.: "; getline(cin >> ws, phone);

cout << "Enter Contact Address: "; getline(cin >> ws, address);

cout << "Enter the Department: "; getline(cin >> ws, department);

cout << "Enter Date of Joining (DD MM YYYY): "; cin >> day >> month >> year;

cin.ignore(); // clear input buffer

cout << "The employee no is: " << count << endl;

}

// Display details void display()

{

cout << "Employee Name: " << name << endl;

cout << "Employee Telephone Number: " << phone << endl; cout << "Employee Contact Address: " << address << endl; cout << "Employee Department: " << department << endl; cout << "Employee Date of Joining: "

<< (day < 10 ? "0" : "") << day << "/"

<< (month < 10 ? "0" : "") << month << "/"

<< year << endl;

}

};

// Initialize static member int Employee::count = 0;

int main()

{

// Default Constructor & Input Employee E1;

E1.accept();

// Change name for your desired output E1.setName("Anuja Salunkhe");

E1.display();

// Parameterized Constructor

Employee E2("Purva", 201, "ENTC", "Pune", "+913486758265", 7, 8, 2021);

E2.display();

// Copy Constructor Employee E3(E2); E3.display();

// Dynamic Allocation (new & delete)

Employee \*E4 = new Employee("Rutuja", 202, "IT", "Pune", "+918374657836", 31, 3,

2023);

E4->display(); delete E4;

return 0;

}

**OUTPUT :**

Enter Name: Anuja Salunkhe

Enter Telephone Number: 75475 Enter Contact Address: 78546

Enter the Department: 56728

Enter Date of Joining (DD MM YYYY): 07/06/2021

The employee no is: 1

Employee Name: Anuja Salunkhe Employee Telephone No.: 75475 Employee Contact Address: 78546 Employee Department: 56728 Employee Date of Joining: 07/06/2021

Parameterized Constructor Block The employee no is: 2

Employee Name: Purva

Employee Telephone No.:9134809

Employee Contact Address: Pune

Employee Department: ENTC Employee Date of Joining: 07/08/2021 Copy Constructor Block

The employee no is: 3 Employee Name: Purva

Employee Telephone Number: 9134809

Employee Contact Address: Pune

Employee Department: ENTC Employee

Date of Joining: 07/08/2021

Parameterized Constructor Block

The employee no is: 4 Employee Name: Rutuja

Employee Telephone Number: +918374657836 Employee Contact Address: Pune

Employee Department: IT

Employee Date of Joining: 31/03/2023

Destructor called for Employee: Rutuja

Destructor called for Employee: Purva

Destructor called for Employee: Purva

Destructor called for Employee: Anuja Salunkhe

Destructor called for Employee: Munajja Dalimbkar (program exited with code: 0)

Press return to