

1. Given that an EMPLOYEE class contains following members: Employee Number, Employee Name, Basic, DA, IT, Net Salary. Member functions: to read the data, to calculate Net Salary and to print data members. Write a C++ program to read the data of N employees and compute Net Salary of each employee. (Dearness Allowance (DA) = 52% of Basic and Income Tax (IT) = 30% of the gross salary. Net Salary = Basic + DA - IT).

- prepare default constructor, parameterized constructor
- array of objects
- add two employees salary

```
#include <iostream>
```

```
#include <string>
```

```
using namespace std;
```

```
class employee
```

```
{
```

```
    private:
```

```
        string name;
```

```
        int number;
```

```
        float basicSalary,netSalary;
```

```
    public:
```

```
        employee():name("NULL"),number(0),basicSalary(0.0){}
```

```
        employee(string name,int no,float  
bsly):name(name),number(no),basicSalary(bsly){}
```

```
        void calculateNetSalary();
```

```
        void displayDetails();
```

```
        int addSalary(employee e);
```

```
};
```

```
void employee::calculateNetSalary()
```

```
{
```

```
    float dearnessAllowance,grossSalary,incomeTax;//no need to display these , these are  
needed only to calculate,so not declaring in private but here
```

```
    dearnessAllowance=(basicSalary*52)/100;
```

```
    grossSalary=basicSalary+dearnessAllowance;
```

```
    incomeTax=(grossSalary*30)/100;
```

```

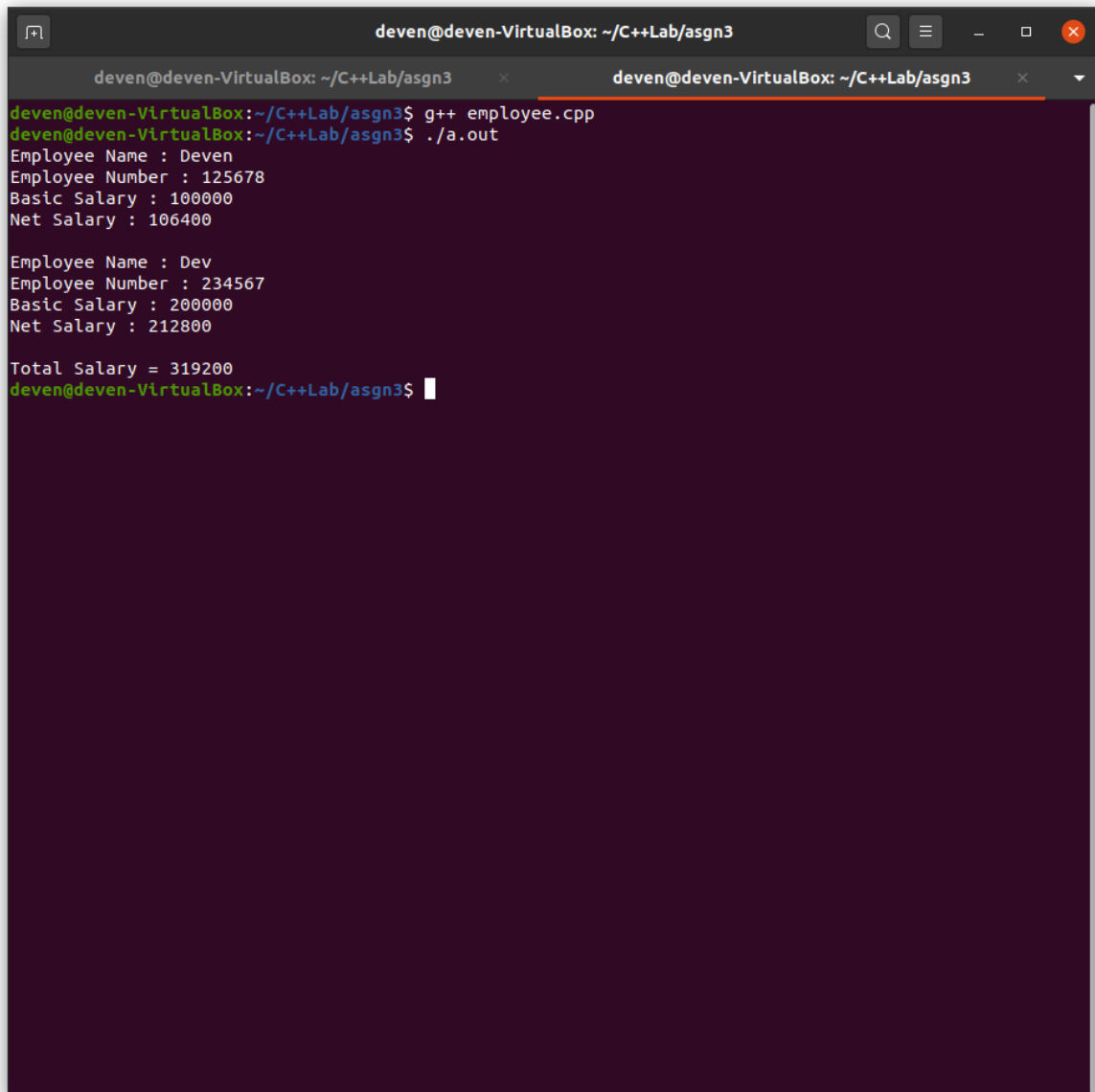
        netSalary=basicSalary+dearnessAllowance-incomeTax;
    }

int employee::addSalary(employee e)
{
    int total=0;
    total=netSalary+e.netSalary;
    return total;
}

void employee::displayDetails()
{
    cout<<"Employee Name : "<<name<<endl;
    cout<<"Employee Number : "<<number<<endl;
    cout<<"Basic Salary : "<<basicSalary<<endl;
    cout<<"Net Salary : "<<netSalary<<endl<<endl;
}

int main()
{
    employee e1("Deven",125678,100000.0);
    employee e2("Dev",234567,200000.0);
    e1.calculateNetSalary();
    e1.displayDetails();
    e2.calculateNetSalary();
    e2.displayDetails();
    int total=e1.addSalary(e2);
    cout<<"Total Salary = "<<total<<endl;
    return 0;
}

```

A screenshot of a terminal window titled 'deven@deven-VirtualBox: ~/C++Lab/asn3'. The terminal shows the compilation and execution of a C++ program. The user enters 'g++ employee.cpp' and then './a.out'. The program outputs employee data for 'Deven' and 'Dev', and a total salary calculation. The terminal has a dark purple background and a light-colored text. The window has standard Linux window controls at the top.

```
deven@deven-VirtualBox: ~/C++Lab/asn3
deven@deven-VirtualBox:~/C++Lab/asn3$ g++ employee.cpp
deven@deven-VirtualBox:~/C++Lab/asn3$ ./a.out
Employee Name : Deven
Employee Number : 125678
Basic Salary : 100000
Net Salary : 106400

Employee Name : Dev
Employee Number : 234567
Basic Salary : 200000
Net Salary : 212800

Total Salary = 319200
deven@deven-VirtualBox:~/C++Lab/asn3$
```

2. inline function to print sqrt of a number [separate program]

```
#include <iostream>
```

```
#include <cmath>
```

```
using namespace std;
```

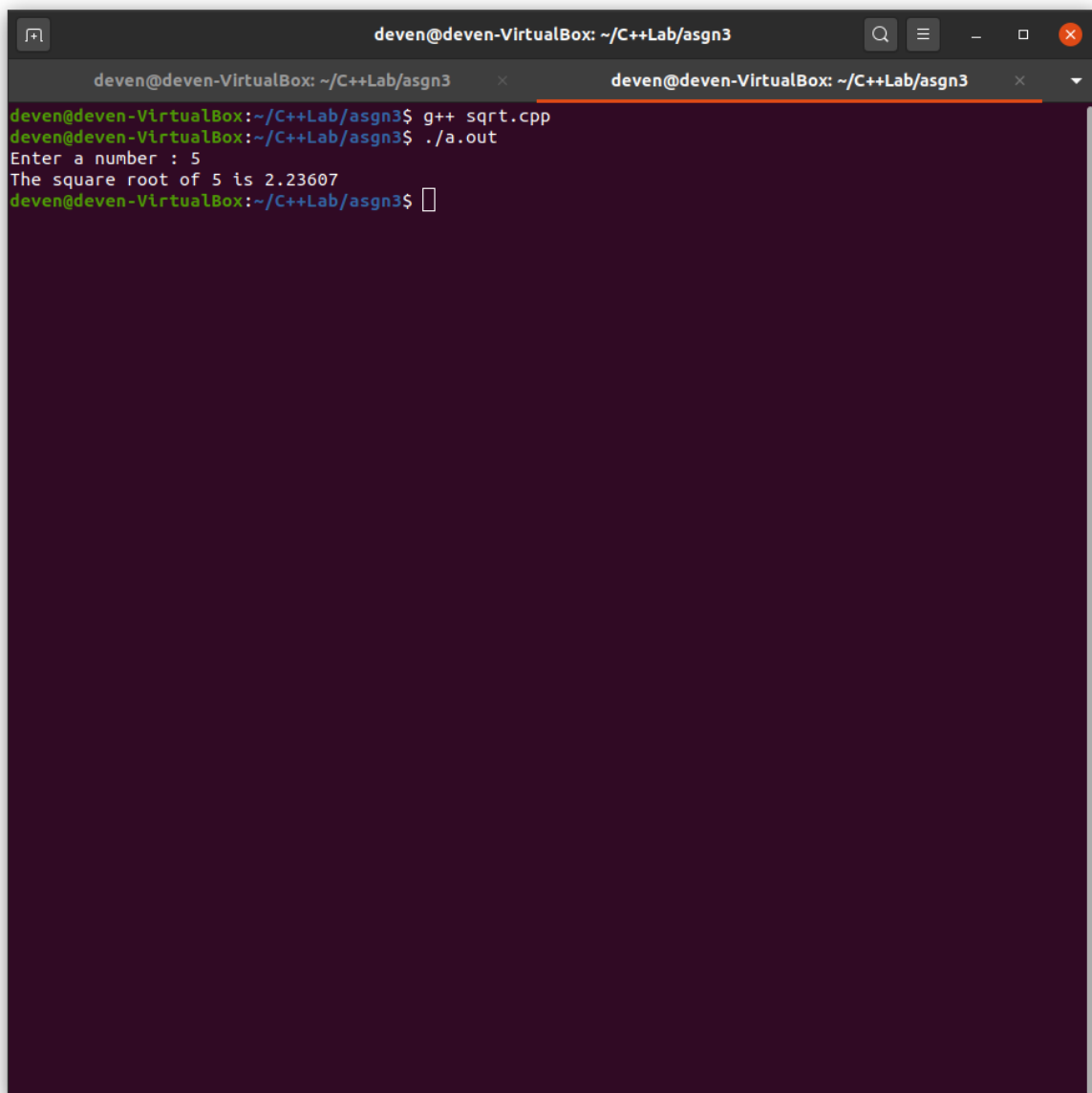
```
inline float sqroot(float n)
```

```
{
```

```
    return sqrt(n);
```

```
}
```

```
int main()
{
    float n;
    cout<<"Enter a number : ";
    cin>>n;
    cout<<"The square root of "<<n<<" is "<<sqrt(n)<<endl;
    return 0;
}
```



The screenshot shows a terminal window titled "deven@deven-VirtualBox: ~/C++Lab/asn3". The terminal contains the following text:

```
deven@deven-VirtualBox:~/C++Lab/asn3$ g++ sqrt.cpp
deven@deven-VirtualBox:~/C++Lab/asn3$ ./a.out
Enter a number : 5
The square root of 5 is 2.23607
deven@deven-VirtualBox:~/C++Lab/asn3$
```