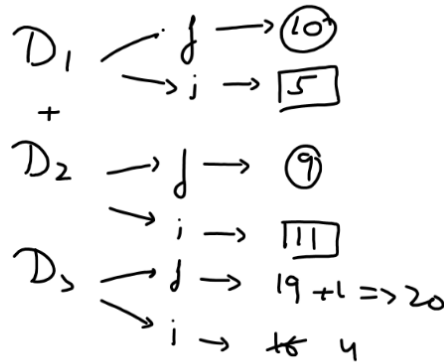


## Adding 2 Objects Of a Class

```
class Distance
```

```
{
    int feet;
    int inches;
public:
```

```
};
```



```
class Distance
```

```
{
    int feet;
    int inches;
public:
    void get()
    {
        cout<<"Enter feet and inches:";
        cin>>feet>>inches;
    }
    void show()
    {
        cout<<feet<<" "<<inches<<endl;
    }
    void add(const Distance&,const Distance&);
};
```

Version 1

```
void Distance ::add(const Distance&P,const Distance&Q)
{
    feet=P.feet+Q.feet;
    inches=P.inches+Q.inches;
    if(inches>=12)
    {
        feet=feet+inches/12;
        inches=inches%12;
    }
}
```

$D_1 (10' 5'')$      $D_2 (9' 11'')$      $D_3 (20' 4'')$

f	10
i	5

f	9
i	11

f	20
i	4

```
int main()
{
    Distance D1,D2,D3;
    ✓ D1.get();
    ✓ D2.get();
    ✓ D3.add(D1,D2);
    D1.show(); 10, 5
    D2.show(); 9, 11
    D3.show(); 20, 4
    return 0;
}
```

```

class Distance
{
    int feet;
    int inches;
public:
    void get()
    {
        cout<<"Enter feet and inches:";
        cin>>feet>>inches;
    }
    void show()
    {
        cout<<feet<<" "<<inches<<endl;
    }
    Distance add(const Distance&);
};

```

Version 2

```

Distance Distance::add(const Distance&Q)
{
    Distance Temp;
    Temp.feet=feet+Q.feet;
    Temp.inches=inches+Q.inches;
    if(Temp.inches>=12)
    {
        Temp.feet=Temp.feet+Temp.inches/12;
        Temp.inches=Temp.inches%12;
    }
    return Temp;
}

```

Temp (units)

21
16

int main()

```

{
    Distance D1,D2,D3;
    D1.get();
    D2.get();
    D3=D1.add(D2);
    D1.show();
    D2.show();
    D3.show();
    return 0;
}

```

D1 (10 9)    Q, D2 (11 7)    D3 (22 4)

```

class Distance
{
    int feet;
    int inches;
public:
    void get()
    {
        cout<<"Enter feet and inches:";
        cin>>feet>>inches;
    }
    void show()
    {
        cout<<feet<<" "<<inches<<endl;
    }
    friend Distance add(const
    Distance&,const Distance &);
};

```

Version 3

```

Distance add(const Distance&P,const Distance &Q)
{
    Distance Temp;
    Temp.feet=P.feet+Q.feet;
    Temp.inches=P.inches+Q.inches;
    if(Temp.inches>=12)
    {
        Temp.feet=Temp.feet+Temp.inches/12;
        Temp.inches=Temp.inches%12;
    }
    return Temp;
}

```

Temp (units)

16
16

int main()

```

{
    Distance D1,D2,D3;
    D1.get();
    D2.get();
    D3=add(D1,D2);
    D1.show();
    D2.show();
    D3.show();
    return 0;
}

```

P, D1 (10 9)    Q, D2 (6 11)    P3 (16 9)