1st QUESTION ANS

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

class Player {
private:
   string name;
   int level;
   int experience;

public:
   Player() : name("Unknown"), level(1), experience(0) {}
   Player(string n, int l, int exp) : name(n), level(l), experience(exp) {}

   Player(const Player &p) {
      name = p.name;
      level = p.level;
      experience = p.experience;
   }

   void displayProfile() {
      cout << "\nPlayer Profile: " << endl;
      cout << "Name: " << name << endl;
      cout << "Level: " << level << endl;
      cout << "Experience Points: " << experience << endl;
   }
};
```

```
// main program strts from here
int main() {
    string name;
    int level, experience;

    // Taking input from the user
    cout << "Enter player name:";
    getline(cin, name);
    cout << "Enter player level: ";
    cin >> level;
    cout << "Enter player experience points: ";
    cin >> experience;

    // Creatign profile with the input of the user
    Player player1(name, level, experience);
    cout << "\nOriginal Profile:" << endl;
    player1.displayProfile();

    // copy of the plyaer
    Player player2 = player1;
    cout << "\nCopied Profile:" << endl;
    player2.displayProfile();

    return 0;
}
```

```
Enter player name:allan
Enter player level: 10
Enter player experience points: 1000

Original Profile:

Player Profile:
Name: allan
Level: 10
Experience Points: 1000

Copied Profile:

Player Profile:
Name: allan
Level: 10
Experience Points: 1000
```

```
Enter player name:apalam chapalam
Enter player level: 1000
Enter player experience points: 10

Original Profile:

Player Profile:
Name: apalam chapalam
Level: 1000
Experience Points: 10

Copied Profile:

Player Profile:
Name: apalam chapalam
Level: 1000
Experience Points: 10
```

2ND QUESTION

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

class Distance {
private:
   int feet;
   int inches;

public:
   Distance() : feet(0), inches(0) {}

   Distance(int f, int i) : feet(f), inches(i) {}

   friend void compareDistances(Distance d1, Distance d2);

   void displayDistance() {
      cout << feet << " feet " << inches << " inches" << endl;
   }
};
void compareDistances(Distance d1, Distance d2) {
   int totalInches1 = d1.feet * 12 + d1.inches;
   int totalInches2 = d2.feet * 12 + d2.inches;

   cout << "\nCOMPARING Distances:" << endl;
   d1.displayDistance();
   d2.displayDistance();

   if (totalInches1 > totalInches2) {
      cout << "First distance is greater." << endl;
```

```
    } else if (totalInches1 < totalInches2) {
        cout << "Second distance is greater." << endl;
    } else {
        cout << "Both distances are equal." << endl;
    }
}

int main() {
    int feet1, inches1, feet2, inches2;

    // IINPUT OF FIRST DISTANCE
    cout << "Enter feet for Distance 1: ";
    cin >> feet1;
    cout << "Enter inches for Distance 1: ";
    cin >> inches1;

    // INPUT OF SECOND DISTANCE
    cout << "\nEnter feet for Distance 2: ";
    cin >> feet2;
    cout << "Enter inches for Distance 2: ";
    cin >> inches2;

    // Creating distance objects with the input
    Distance d1(feet1, inches1);
    Distance d2(feet2, inches2);

    // Comparing distances from both inputs from the user
    compareDistances(d1, d2);
    return 0;
}
```

OUTPUT FOR 2nd QUESTION

```
Enter feet for Distance 1: 10
Enter inches for Distance 1: 50

Enter feet for Distance 2: 13
Enter inches for Distance 2: 2

COMPARING Distances:
10 feet 50 inches
13 feet 2 inches
First distance is greater.
```

```
Enter feet for Distance 1: 99
Enter inches for Distance 1: 10

Enter feet for Distance 2: 69
Enter inches for Distance 2: 1

COMPARING Distances:
99 feet 10 inches
69 feet 1 inches
First distance is greater.


=== Code Execution Successful ===
```