

```
> make -s
> ./main
Enter name: Kenry
Enter another (y/n)? y
Enter name: Rushil
Enter another (y/n)? y
Enter name: Olenka
Enter another (y/n)? y
Enter name: Doraemon
Enter another (y/n)? y
Enter name: SpongeBob
Enter another (y/n)? y
Enter name: Gold
Enter another (y/n)? y
Enter name: Monkey
Enter another (y/n)? n

Unsorted list:
Kenry
Rushil
Olenka
Doraemon
SpongeBob
Gold
Monkey

Sorted list:
Doraemon
Gold
Kenry
Monkey
Olenka
Rushil
SpongeBob
> █
```

Main.cpp

```
// Kenry Yu, Olenka Bilinska, Rushil Prajapati
```

```
// Demo @ 5:10
```

```
// Week 8 Lab 2
```

```
#include "person.h"
```

```
#include <iostream>
```

```
using namespace std;
```

```
const int SIZE = 100;
```

```
void bsort(person *[], int);
```

```
int main() {  
    person *persPtr[SIZE];  
    int n = 0;  
    char choice = '\0';  
    do {  
        persPtr[n] = new person;    // make new object  
        persPtr[n]->setName();    // set person's names  
        n++;    // count new person  
        cout << "Enter another (y/n)? "; // enter another  
        cin >> choice;  
    } while (choice != 'N' && choice != 'n');  
    cout << "\nUnsorted list:" << endl;  
    for (int i = 0; i < n; i++)  
        persPtr[i]->printName();  
    cout << "\nSorted list:" << endl;  
    bsort(persPtr, n);  
    for (int i = 0; i < n; i++)  
        persPtr[i]->printName();  
    return 0;  
}
```

```
void bsort(person *names[], int size) {
```

```
    for (int i = 0; i < size - 1; i++)
```

```
if (int(names[i]->getName())[0] > int(names[i + 1]->getName())[0]))  
    for (int j = i + 1; j > 0; j--) {  
        if (int(names[j]->getName())[0] < int(names[j - 1]->getName())[0])) {  
            person *temp = names[j - 1];  
            names[j - 1] = names[j];  
            names[j] = temp;  
        } else {  
            break;  
        }  
    }  
}
```

Person.h

```
#include <iostream>
```

```
#include <string> //for string class
```

```
using namespace std;
```

```
////////////////////////////////////
```

```
class person // class of persons
```

```
{
```

```
protected:
```

```
    string name; // person's name
```

```
public:
```

```
    void setName() // set the name
```

```
{
```

```
    cout << "Enter name: ";
```

```
    cin >> name;
```

```
}
```

```
    void printName() // display the name
```

```
{
```

```
    cout << name << endl;
```

```
}
```

```
    string getName() // return the name
```

```
{
```

```
    return name;
```

```
}
```

```
};
```

```
////////////////////////////////////
```