

Example of using C structure

<http://www.zentut.com/c-tutorial/c-structure/>

This example shows you how to use a structure to wrap student information and manipulate it by reading information to an array of student structures.

```
#include <stdio.h>
```

```
typedef struct _student{  
    char name[50];  
    unsigned int mark;  
} student;
```

```
void print_list(student list[], int size);  
void read_list(student list[], int size);
```

```
void main(){
```

```
    const int size = 3;  
    student list[size];
```

```
    read_list(list,size);
```

```
    print_list(list,size);
}

void read_list(student list[], int size)
{
    printf("Please enter the student information:\n");

    for(int i = 0; i < size;i++){
        printf("\nname:");
        scanf("%S",&list[i].name);

        printf("\nmark:");
        scanf("%U",&list[i].mark);
    }
}

void print_list(student list[], int size){
    printf("Students' information:\n");
```

```
for(int i = 0; i < size;i++){  
    printf("\nname: %s, mark: %u",list[i].name,list[i].mark);  
}  
}
```

The following is the program's output:

Please enter the student information:

name:Jack

mark:5

name:Anna

mark:7

name:Harry

mark:8

Students' information:

name: J, mark: 5

name: A, mark: 7

name: H, mark: 8

In this tutorial, you have learned how to use C structure to create new complex data types that wrap multiple related variables into one variable to make it more efficient to manipulate data.