

**LAB - 8**  
**C PROGRAMMING**  
**28-04-2024**

**Reading and Displaying a Person's Address Using Union**

**Program (17)** Declare a union containing 5 string variables (Name, House Name, City Name, State and Pin code) each with a length of C\_SIZE (user defined constant). Then, read and display the address of a person using a variable of the union.

Ans:

Program Code

```
#include <stdio.h>
#define C_SIZE 100

//Define Union
union Address
{
    char name[C_SIZE];
    char house_name[C_SIZE];
    char city_name[C_SIZE];
    char state[C_SIZE];
    char pin_code[C_SIZE];
};

int main()
{
```

*//Declare variable of union*

**union** Address address;

printf("Enter Name: ");  
fgets(address.name, C\_SIZE, **stdin**);

printf("Enter House Name: ");  
fgets(address.house\_name, C\_SIZE, **stdin**);

printf("Enter City Name: ");  
fgets(address.city\_name, C\_SIZE, **stdin**);

printf("Enter State: ");  
fgets(address.pin\_code, C\_SIZE, **stdin**);

printf("Enter Pin Code: ");  
fgets(address.pin\_code, C\_SIZE, **stdin**);

*//Address Displaying*

printf("\nDisplaying Address:\n");  
printf("Name: %s", address.name);  
printf("House Name: %s", address.house\_name);  
printf("City Name: %s", address.city\_name);  
printf("State: %s", address.state);  
printf("Pin Code: %s", address.pin\_code);

**return 0;**

}

```
Open ▾ [F4] *union.c ~/Desktop/C/Union Save [≡] [⏮] [⏭] [✖]
1 //UNION
2 //LAB 8
3 //28-04-2024
4 //PROGRAM 17
5 //Q/N) Declare a union containing 5 string variables (Name, House Name, City Name, State and Pin code) each with a length of C_SIZE (user defined
   constant). Then, read and display the address of a person using a variable of the union.
6
7 #include <stdio.h>
8 #define C_SIZE 100
9
10 //Define Union
11 union Address
12 {
13     char name[C_SIZE];
14     char house_name[C_SIZE];
15     char city_name[C_SIZE];
16     char state[C_SIZE];
17     char pin_code[C_SIZE];
18 };
19
20 int main()
21 {
22     //Declare variable of union
23     union Address address;
24
25     printf("Enter Name: ");
26     fgets(address.name, C_SIZE, stdin);
27
28     printf("Enter House Name: ");
29     fgets(address.house_name, C_SIZE, stdin);
30
31     printf("Enter City Name: ");
32     fgets(address.city_name, C_SIZE, stdin);
33
34     printf("Enter State: ");
35     fgets(address.pin_code, C_SIZE, stdin);
36
37     printf("Enter Pin Code: ");
38     fgets(address.pin_code, C_SIZE, stdin);
39
40     //Address Displaying
41     printf("\nDisplaying Address:\n");
42     printf("Name: %s", address.name);
43     printf("House Name: %s", address.house_name);
44     printf("City Name: %s", address.city_name);
45     printf("State: %s", address.state);
46     printf("Pin Code: %s", address.pin_code);
47
48     return 0;
49 }
```

## OUTPUT

```
Terminal
File Edit View Search Terminal Help
kcr@kcr-To-be-filled-by-O-E-M:~/Desktop/C/Union$ gcc union.c
kcr@kcr-To-be-filled-by-O-E-M:~/Desktop/C/Union$ ./a.out
Enter Name: Karthik_Krishnan
Enter House Name: Kunnathu_Pisharam
Enter City Name: Kottayam
Enter State: Kerala
Enter Pin Code: 686611

Displaying Address:
Name: 686611
House Name: 686611
City Name: 686611
State: 686611
Pin Code: 686611
kcr@kcr-To-be-filled-by-O-E-M:~/Desktop/C/Union$
```