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1  /*WAP to declare structure named student with name, age, address and marks. Assume the data types.
2  Take the data for these members from user and display them.*/
3  #include <stdio.h>
4
5  // Define the structure named Student
6  struct Student
7  {
8      char name[30];
9      int age;
10     char address[30];
11     float marks;
12 };
13
14 int main()
15 {
16     // Declare a variable of type Student
17     struct Student stu;
18
19     // Input student details from the user
20     printf("Enter your name: ");
21     scanf("%[^\n]s", stu.name);
22
23     printf("Enter your age: ");
24     scanf("%d", &stu.age);
25
26     // Corrected format specifier for reading the address
27     printf("Enter your address: ");
28     scanf("%[^\n]s", stu.address);
29
30     printf("Enter your marks: ");
31     scanf("%f", &stu.marks);
32
33     // Display student details
34     printf("\nName: %s\nAge: %d\nAddress: %s\nMarks: %.2f\n", stu.name, stu.age, stu.address, stu.marks);
35
36     return 0;
37 }
38

```

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manish@redora: ~/Vs-code/bca-programming-Repo/C/task14-s
● $ ./question1
Enter your name: Benjamin Graham
Enter your age: 55
Enter your address: USA
Enter your marks: 95.54

Name: Benjamin Graham
Age: 55
Address: USA
Marks: 95.54

```

```

1 // WAP to take details of 5 students in Q1.
2 #include <stdio.h>
3
4 // Define the structure named Q1
5 struct Q1
6 {
7     char name[20];
8     int age;
9     int class;
10    char department[20];
11 };
12
13 int main()
14 {
15     // Declare an array of Q1 structures to store details of 5 students
16     struct Q1 student[5];
17
18     // Input details of 5 students
19     for (int i = 0; i < 5; i++)
20     {
21         printf("Enter your name: ");
22         scanf("%s", student[i].name);
23         printf("Enter your age: ");
24         scanf("%d", &student[i].age);
25         printf("Enter your class: ");
26         scanf("%d", &student[i].class);
27         printf("Enter your department: ");
28         scanf("%s", student[i].department);
29         printf("\n");
30     }
31
32     // Display details of all 5 students
33     printf("Your details:\n");
34     for (int i = 0; i < 5; i++)
35     {
36         printf("Name: %s\nAge: %d\nClass: %d\nDepartment: %s\n", student[i].name, student[i].age, student[i].class, student[i].department);
37         printf("\n");
38     }
39
40     return 0;
41 }
42

```

```
manish@fedora: ~/vs-code/bca-programming-repo/C/task14-structure main!  
● $ ./question2  
Enter your name: Benjamin Graham  
Enter your age: 23  
Enter your class: 14  
Enter your department: BCA  
  
Enter your name: Frank  
Enter your age: 21  
Enter your class: 16  
Enter your department: MCA  
  
Enter your name: Grand  
Enter your age: 22  
Enter your class: 14  
Enter your department: Bit  
  
Enter your name: Hanut  
Enter your age: 24  
Enter your class: 15  
Enter your department: MBA  
  
Enter your name: Gill  
Enter your age: 22  
Enter your class: 12  
Enter your department: Science  
  
Your details:  
Name: Benjamin Graham  
Age: 23  
Class: 14  
Department: BCA  
  
Name: Frank  
Age: 21  
Class: 16  
Department: MCA  
  
Name: Grand  
Age: 22  
Class: 14  
Department: Bit  
  
Name: Hanut  
Age: 24  
Class: 15  
Department: MBA  
  
Name: Gill  
Age: 22  
Class: 12  
Department: Science
```

```
1  /*WAP to declare structure named employee with name, age, post, salary
2  as data members to store the details of 5 employees.*/
3  #include <stdio.h>
4
5  // Define the structure named Employee
6  struct Employee
7  {
8      char name[20];
9      int age;
10     char post[20];
11     int salary;
12 };
13
14 int main()
15 {
16     // Declare an array of Employee structures to store details of 5 employees
17     struct Employee emp[5];
18
19     // Input details of 5 employees
20     for (int i = 0; i < 5; i++)
21     {
22         printf("Enter your name: ");
23         scanf("%s", emp[i].name);
24         printf("Enter your age: ");
25         scanf("%d", &emp[i].age);
26         printf("Enter your post: ");
27         scanf("%s", emp[i].post);
28         printf("Enter your salary: ");
29         scanf("%d", &emp[i].salary);
30         printf("\n");
31     }
32
33     // Display details of all 5 employees
34     printf("Employees' details:\n");
35     for (int i = 0; i < 5; i++)
36     {
37         printf("Name: %s\nAge: %d\nPost: %s\nSalary: %d\n", emp[i].name, emp[i].age, emp[i].post, emp[i].salary);
38         printf("\n");
39     }
40
41     return 0;
42 }
43
```

```
manish@fedora: ~/vs-code/bca-programming-repo/C/task14-structure main!  
● $ ./question3
```

```
Enter your name: Benjamin  
Enter your age: 23  
Enter your post: CEO  
Enter your salary: 230000
```

```
Enter your name: Beor  
Enter your age: 22  
Enter your post: Manager  
Enter your salary: 120000
```

```
Enter your name: Sundar  
Enter your age: 34  
Enter your post: Developer  
Enter your salary: 1200000
```

```
Enter your name: Maanushi  
Enter your age: 23  
Enter your post: Product Manager  
Enter your salary: 120000
```

```
Enter your name: Khum  
Enter your age: 43  
Enter your post: Founder  
Enter your salary: 2000000
```

```
Employees' details:
```

```
Name: Benjamin  
Age: 23  
Post: CEO  
Salary: 230000
```

```
Name: Beor  
Age: 22  
Post: Manager  
Salary: 120000
```

```
Name: Sundar  
Age: 34  
Post: Developer  
Salary: 1200000
```

```
Name: Maanushi  
Age: 23  
Post: Product Manager  
Salary: 120000
```

```
Name: Khum  
Age: 43  
Post: Founder  
Salary: 2000000
```

```
1 // WAP to find the average salary of the employees in Q3.
2 #include <stdio.h>
3
4 // Define the structure named Employee
5 struct Employee
6 {
7     char name[20];
8     int age;
9     char post[20];
10    int salary;
11 };
12
13 int main()
14 {
15     int avg_salary = 0;
16
17     // Declare an array of Employee structures to store details of 5 employees
18     struct Employee emp[5];
19
20     // Input details of 5 employees
21     for (int i = 0; i < 5; i++)
22     {
23         printf("Enter your name: ");
24         scanf(" %[\n]s", emp[i].name);
25         printf("Enter your age: ");
26         scanf("%d", &emp[i].age);
27         printf("Enter your post: ");
28         scanf(" %[\n]s", emp[i].post);
29         printf("Enter your salary: ");
30         scanf("%d", &emp[i].salary);
31         printf("\n");
32     }
33
34     for (int i = 0; i < 5; i++)
35     {
36         avg_salary += emp[i].salary;
37     }
38
39     printf("The average salary of an employee is %d.\n", avg_salary / 5);
40     return 0;
41 }
42
```

```
manish@fedora: ~/vs-code/bca-programming-repo/C/task14-structure main!  
● $ ./question4  
Enter your name: ben  
Enter your age: 23  
Enter your post: hod  
Enter your salary: 200000  
  
Enter your name: beri  
Enter your age: 32  
Enter your post: ceo  
Enter your salary: 120000  
  
Enter your name: hur  
Enter your age: 43  
Enter your post: hod  
Enter your salary: 320000  
  
Enter your name: manish  
Enter your age: 42  
Enter your post: founder and ceo  
Enter your salary: 12000000  
  
Enter your name: peo  
Enter your age: 32  
Enter your post: manager  
Enter your salary: 320000  
  
The average salary of an employee is 2592000.  
  
manish@fedora: ~/vs-code/bca-programming-repo/C/task14-structure main!  
○ $ □
```