

STRUCTURES, UNIONS & ENUMERATED STRUCTURES

Exercises:

```
1)  struct student
    {
        int age, rno; char nm[20];
    };

void f(struct student *n)
{
    printf("Enter the details of s : ");
    scanf("%d %d %[^\n]", &n->age, &n->rno, &n->nm);
    printf("Details of s : ");
    printf("%d, %d, %s", n->age, n->rno, n->nm);
}

void main()
{
    struct student s;
    f(&s);
}
```

2) struct student

```
{  
    int age, rno; char nm[20];  
};  
void f(struct student *n)  
{  
    printf("Enter the details of s : ");  
    scanf("%d %d %[^\n]", &n->age, &n->rno, &n->nm);  
}  
void main()  
{  
    struct student s;  
    f(&s);  
    printf("Details of s : ");  
    printf("%d, %d, %s", s.age, s.rno, s.nm);  
}
```

3) union uni

```
{  
    int a;  
    char c[2];  
};
```

```
void main()
{
    union uni u;
    u.c[0]=38;
    u.c[1]=2;
    printf("%d ", u.a);
}
```

Aptitude Questions:

- 1) 1 0.000000
- 2) Error! A structure is just declaration of a new datatype, no memory is reserved for it. Hence, we can't assign values to data members along with the structure definition.
- 3)
(Blank – no output)
- 4) Error! This is because, in C we can't keep a static variable inside a structure. The compiler allocates memory for given structure contiguously, and hence the same memory segment. *The static storage class has been discussed in detail in Chapter 20.*
- 5) 18 bytes