

## Programme 1:

```
#include<stdio.h>
void swap(int n,int m)
{
    int temp=n;
    n=m;
    m=temp;
    printf("after swapping value is a: %d",n);
    printf("after swapping value is b: %d",m);
}
int main()
{
    int a,b;
    printf("enter the number\n");
    scanf("%d%d",&a,&b);
    printf("before swapping value is a: %d",a);
    printf("before swapping value is b: %d",b);
    swap(a,b);
    printf("a : %d",a);
    printf("b : %d",b);
}
```

o/p:

enter the number

23

45

before swapping value is a: 23

before swapping value is b: 45

after swapping value is a: 45

after swapping value is b: 23

a : 23

b : 45

enter the number

56

78

before swapping value is a: 56

before swapping value is b: 78

after swapping value is a: 78

after swapping value is b: 56

a : 56

b : 78

pass by reference :

```
#include<stdio.h>
void swap(int*,int*);
int main()
{
    int a,b;
    printf("enter the number\n");
    scanf("%d%d",&a,&b);
    printf("before swapping value is a: %d\n",a);
    printf("before swapping value is b: %d\n",b);
    swap(&a,&b);
    printf("a : %d\n",a);
    printf("b : %d\n",b);
}
void swap(int *n,int *m)
{
    int temp=*n;
    *n=*m;
    *m=temp;
    printf("after swapping value is a: %d\n",*n);
    printf("after swapping value is b: %d\n",*m);
}
```

o/p:

```
enter the number
23
45
before swapping value is a: 23
before swapping value is b: 45
after swapping value is a: 45
after swapping value is b: 23
a : 45
b : 23
```

```
enter the number
12
2
before swapping value is a: 12
before swapping value is b: 2
after swapping value is a: 2
after swapping value is b: 12
a : 2
b : 12
```

programme 2:

```
#include<stdio.h>
int main()
{
    int n;
    printf("enter the element");
    scanf("%d",&n);
    int num[n];
    for(int i=0;i<n;i++)
    {
        scanf("%d",&num[i]);
    }
    int *a=num;
    for(int i=0;i<n;i++)
    {
        printf("%d\n",*(a+i));
    }
}
```

o/p:

enter the element 3

1  
2  
3  
1  
2  
3

enter the element 5

1  
2  
3  
4  
5  
1  
2  
3  
4  
5

programme 3:

```
#include<stdio.h>
struct stud
{
    int rollno;
    char name[25];
    int mark[20];
}
```

```

        int total;
};
void add(struct stud *s,int );
void display(struct stud *s,int ,int);
int main()
{
    int n;
    int res;
    printf("howmany record insert\n");
    scanf("%d",&n);
    struct stud s[n];
    add(s,n);
}
void add(struct stud *s,int n)
{
    int m;
    for(int i=0;i<n;i++)
    {
        printf("\nrollno :");
        scanf("%d",&s[i].rollno);
        printf("\nname :");
        scanf("%s",s[i].name);
        printf("enter the howmany mark");
        scanf("%d",&m);
        s[i].total=0;
        for(int j=0;j<m;j++)
        {
            printf("\nmark :");
            scanf("%d",&s[i].mark[j]);
            s[i].total=s[i].total+s[i].mark[j];
        }
    }
    display(s,n,m);
}
void display(struct stud *s,int n,int m)
{
    int flag;
    for(int i=0;i<n;i++)
    {
        printf("\nrollno: %d",s[i].rollno);
        printf("\nname : %s",s[i].name);
        for(int j=0;j<m;j++){
            printf("\nmark : %d",s[i].mark[j]);
            if(s[i].mark[j]<12)
            {
                flag=1;
            }
            else
            {
                flag=2;
            }
        }
    }
}

```

```

        if(flag==1)
        {
            printf("\nresult is fail\n");
        }
        else
        {
            printf("\ntotal : %d",s[i].total);
            printf("\nresult is pass\n");
        }
    }
}

```

o/p :

howmany record insert

2

rollno :1

name :vivek

enter the howmany mark3

mark :34

mark :56

mark :78

rollno :2

name :ronak

enter the howmany mark3

mark :12

mark :2

mark :8

rollno: 1

name : vivek

mark : 34

mark : 56

mark : 78

total : 168

result is pass

rollno: 2

name : ronak

mark : 12

mark : 2  
mark : 8  
result is fail

programme 4:

```
#include<stdio.h>
char print(char);
int main()
{
    char ch;
    printf("enter the cahraction : \n");
    scanf("%c",&ch);
    char (*f)(char);
    f = print;
    char ch2=f(ch);
    printf("\n character is : %c",ch2);
}
char print(char ch2)
{
    return ch2;
}
```

o/p:

enter the cahraction :  
D

character is : D  
enter the cahraction :  
S

character is : S

programme 5:

```
#include<stdio.h>
void function(int [],int);
int main()
{
    int n;
    printf("enter the number of element");
    scanf("%d",&n);
    int arr[n];
    for(int i=0;i<n;i++)
    {
        scanf("%d",&arr[i]);
    }
    function(arr,n);
}
```

```

void function(int arr[],int n)
{
    for(int i=0;i<n-1;i++)
    {
        for(int j=i+1;j<n;j++)
        {
            if(arr[i]>arr[j])
            {
                int temp=arr[i];
                arr[i]=arr[j];
                arr[j]=temp;
            }
        }
    }
    for(int i=0;i<n;i++)
    {
        printf("%d",arr[i]);
    }
}

```

o/p:

enter the number of element 4

12  
34  
21  
7

7  
12  
21  
34

enter the number of element 5

12  
2  
34  
56  
7

2  
7  
12  
34  
56

programme 7:

```
#include<stdio.h>
#include<string.h>
int main()
{
    int n,len,i,in;
    printf("how many character are insert ?\n");
    scanf("%d",&n);
    char str[n];
    printf("\n enter the string");
    scanf("%s",str);
    len=strlen(str);
    in=len-1;
    for(i=0;i<in;i++)
    {
        if(str[i]!=str[in])
        {
            break;
        }
        in--;
    }
    if(i>=in)
    {
        printf("\n %s is a palindrome string",str);
    }
    else
    {
        printf("\n %s is not a palindrome string",str);
    }
}
```

o/p:

how many character are insert ?

4

enter the string

vivek

vivek is not a palindrome string

how many character are insert ?

3

enter the string

viv

viv is a palindrome string