

Aim:

To write a C program using the user defined function power(a,b) to calculate the value of 'a' raised to 'b'.

Algorithm:

- 1) Start the program.
- 2) Declare two variables a and b.
- 3) Get values for 'a' and 'b'.
- 4) Calculate a^b using power(a,b) function (userdefined).
- 5) Display the result.
- 6) Stop the program.

Program:

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

int power(int, int);

void main()
{
    int a,b,pow;
    clrscr();
    printf("\nEnter A: ");
    scanf("%d",&a);
    printf("\nEnter B: ");
    scanf("%d",&b);
    pow = power(a,b);
    printf("Value of %d raised to %d is %d",a,b,pow);
    getch();
}
```

```
int power(int a, int b)
{
    int i,res;
    res = 1;
    for(i=0;i<b;i++)
        res *=a;
    return res;
}
```

Result:

Thus the C program using user define function power() is executed successfully.