

```

1  #include<stdio.h>
2  /*rite a program to read Title, Author and Price of 5 books using array of structures.
3  Display the records in ascending order of Price.*/
4  struct book{
5      char title[100],author[100];
6      int price;
7  };
8  void main(){
9      int i,j;
10     struct book b[3];
11     for(i=0;i<3;i++){
12         printf("Enter Title of the book\n");
13         scanf("%s",&b[i].title);
14         printf("Enter the name of the author of the book\n");
15         scanf("%s",&b[i].author);
16         printf("Enter price of the book\n");
17         scanf("%d",&b[i].price);
18     }
19     for(j=0;j<3;j++){
20         printf("\n%d Title of the book\n",j+1);
21         printf("\t%s",b[j].title);
22         printf("\nname of the author of the book\n");
23         printf("\t%s",b[j].author);
24         printf("\nprice of the book\n");
25         printf("\t%d",b[j].price);
26     }
27     getch();
28 }

```



```

J: > Notes > coding > cp Qbank code > C Q2.c > ...
1  //Implement a program to perform addition of two matrices.
2  #include<stdio.h>
3  void main(){
4      int j[3][3],k[3][3],a,b,c,d;
5      printf("enter array elements");
6      for(a=0;a<3;a++){
7          printf("\n");
8          for(b=0;b<3;b++){
9              scanf("%d",&j[a][b]);
10         }
11     }
12     printf("enter 2nd array elements");
13     for(c=0;c<3;c++){
14         printf("\n");
15         for(d=0;d<3;d++){
16             scanf("%d",&k[c][d]);
17         }
18     }
19     for(a=0;a<3;a++){
20         printf("\n");
21         for(b=0;b<3;b++){
22             printf("%d ",j[a][b]);
23         }
24     }
25     printf("\n");
26     for(c=0;c<3;c++){
27         printf("\n");
28         for(d=0;d<3;d++){
29             printf("%d ",k[c][d]);
30         }
31     }
32     printf("\n Sum of the arrays");
33     for(c=0;c<3;c++){
34         printf("\n");
35         for(d=0;d<3;d++){
36             printf("%d ",j[c][d]+k[c][d]);
37         }
38     }
39     getch();
40 }

```

26°C Cloudy

```

1  //Implement a program to perform addition of two matrices.
2  #include<stdio.h>
3  void main(){
4      int j[3][3],a,b,c,d;
5      printf("enter array elements");
6      for(a=0;a<3;a++){
7          printf("\n");
8          for(b=0;b<3;b++){
9              scanf("%d",&j[a][b]);
10             }
11         }
12         printf("\n transpose of matrices");
13         for(c=0;c<3;c++){
14             printf("\n");
15             for(d=0;d<3;d++){
16                 printf("%d ",j[d][c]);
17             }
18         }
19         getch();
20     }

```

```

//fibonacci series
#include<stdio.h>
void main(){
    int n1=0, n2=1,n,temp;
    printf("Enter number of elements\n");
    scanf("%d",&n);
    printf("%d %d",n1,n2);
    for(int i=0;i<n-2;i++){
        temp=n1+n2;
        n1=n2;
        n2=temp;
        printf("%d ",temp);
    }
    getch();
}

```

```
1 //Write a program using recursion to find factorial of a number.
2 #include<stdio.h>
3 int fact(int n){
4     if(n==0)
5         return 1;
6     else{
7         return n*fact(n-1);
8     }
9 }
10 void main(){
11     int a;
12     printf("Enter no.");
13     scanf("%d",&a);
14     printf("%d",fact(a));
15     getch();
16 }
```

*//Implement a program to perform multiplication` of two matrices.*

```
#include<stdio.h>
void main(){
    int j[3][3],k[3][3],product[3][3],a,b,c,d,e;
    printf("enter array elements");
    for(a=0;a<3;a++){
        printf("\n");
        for(b=0;b<3;b++){
            scanf("%d",&j[a][b]);
        }
    }
    printf("enter 2nd array elements");
    for(c=0;c<3;c++){
        printf("\n");
        for(d=0;d<3;d++){
            scanf("%d",&k[c][d]);
        }
    }
    for(a=0;a<3;a++){
        printf("\n");
        for(b=0;b<3;b++){
            printf("%d ",j[a][b]);
        }
    }
    printf("\n");
    for(c=0;c<3;c++){
        printf("\n");
        for(d=0;d<3;d++){
            printf("%d ",k[c][d]);
        }
    }
    printf("\n product of the matrices");
    for(c=0;c<3;c++){
        printf("\n");
        for(d=0;d<3;d++){
            product[c][d]=0;
            for(e=0;e<3;e++){
                product[c][d]+=j[c][e]*k[e][d];
            }
        }
    }
    for(c=0;c<3;c++){
        printf("\n");
        for(d=0;d<3;d++){
            printf("%d ",product[c][d]);
        }
    }
    getch();
}
```

```

#include<stdio.h>
int power(int n,int x){
    if(n==0)
        return 1;
    else{
        return x*power(n-1,x);
    }
}
void main(){
    int x,p;
    printf("ENTER the no.");
    scanf("%d",&x);
    printf("Power of the number");
    scanf("%d",&p);
    printf("required answer is %d",power(p,x));
    getch();
}

```

*//Write a program to find largest element of an 1D array.*

```

#include<stdio.h>
void main(){
    int a[10],temp=0;
    printf("Enter array elements");

    for(int i=0;i<10;i++){
        scanf("%d",&a[i]);
    }
    for(int i=0;i<10;i++)
    {
        if(a[i]>temp)
        {
            temp=a[i];
        }
    }
    printf("largest number in the array is %d",temp);
    getch();
}

```

*//Write a Program to calculate and display sum of all the elements of the matrix.*

```
#include<stdio.h>
void main(){
    int a[3][3],sum=0;
    printf("enter array elements");
    for(int i=0;i<3;i++){
        printf("\n");
        for(int j=0;j<3;j++){
            scanf("%d",&a[i][j]);
        }
    }
    for(int i=0;i<3;i++){
        printf("\n");
        for(int j=0;j<3;j++){
            sum+=a[i][j];
        }
    }
    printf("sum of the elements is %d",sum);
    getch();
}
```

*//Write a program to check if the entered number is prime number or not.*

```
#include<stdio.h>
void main(){
    int num,flag=0;
    printf("Enter the number you want to check");
    scanf("%d",&num);
    for(int i=2;i<num;i++)
    {
        if(num%i==0){
            flag=0;
            break;
        }
        else
            flag=1;
    }
    if(flag==1)
        printf("PRIME number");
    else
        printf("non prime");
    getch();
}
```

*//Write a program in C to find out the power of x raised to n (xn), using non-recursive fucntion*

```
#include<stdio.h>
#include<math.h>
int power(){
    int x=5,n=3,p=1;
    for(int i=0;i<n;i++){
        p=p*x;
    }
    return p;
}
void main(){
    printf("%d",power());
    getch();
}
```