DAY 21-22

1. Create two arrays named as matrix1 and matrix2 of 3X 3 size each. Initialize each element to 0 to 10 value. Print the content of both the arrays.

#include<stdio.h>

#include<conio.h>

void main()

{

int a[20][30],b[20][30], r,c,i,j;

clrscr();

printf("\n\n\t Enter row and column you want =>");

scanf("%d,%d",&r,&c);

// READ

for(i=0; i<r; i++)

{

for(j=0; j<c; j++)

{

printf("\n\t Enter a[%d][%d] =>",i,j);

scanf("%d",&a[i][j]);

}

}

for(i=0; i<r; i++)

{

for(j=0; j<c; j++)

{

printf("\n\t Enter b[%d][%d] =>",i,j);

scanf("%d",&b[i][j]);

}

}

// PRINT

clrscr();

printf("\n\n\t MATRIX 1\n ");

for(i=0; i<r; i++)

{

for(j=0; j<c; j++)

{

printf(" %d ",a[i][j]);

}

printf("\n\n");

}

printf("\n\n\t MATRIX 2\n ");

for(i=0; i<r; i++)

{

for(j=0; j<c; j++)

{

printf(" %d ",b[i][j]);

}

printf("\n\n");

}

getch();

}

OUTPUT:

Enter row and column you want =>3,3

Enter a[0][0] =>3

Enter a[0][1] =>4

Enter a[0][2] =>5

Enter a[1][0] =>6

Enter a[1][1] =>1

Enter a[1][2] =>4

Enter a[2][0] =>7

Enter a[2][1] =>4

Enter a[2][2] =>2

Enter b[0][0] =>7

Enter b[0][1] =>8

Enter b[0][2] =>6

Enter b[1][0] =>4

Enter b[1][1] =>2

Enter b[1][2] =>9

Enter b[2][0] =>1

Enter b[2][1] =>0

Enter b[2][2] =>4

MATRIX 1

3 4 5

6 1 4

7 4 2

MATRIX 2

7 8 6

4 2 9

1. 0 4

2 Perform the matrix addition of the above two matrixes (mentioned in Program No:1 ) and store the answer in the third 3X3 matrix named as matrix3.

#include<stdio.h>

#include<conio.h>

void main()

{

int a[20][30],b[20][30],sum[20][30], r,c,i,j;

clrscr();

printf("\n\n\t Enter row and column you want =>");

scanf("%d,%d",&r,&c);

// READ

for(i=0; i<r; i++)

{

for(j=0; j<c; j++)

{

printf("\n\t Enter a[%d][%d] =>",i,j);

scanf("%d",&a[i][j]);

}

}

for(i=0; i<r; i++)

{

for(j=0; j<c; j++)

{

printf("\n\t Enter b[%d][%d] =>",i,j);

scanf("%d",&b[i][j]);

}

}

for(i=0; i<r; i++)

{

for(j=0; j<c; j++)

{

sum[i][j] = a[i][j] + b[i][j];

}

}

// PRINT

clrscr();

printf("\n\n\t MATRIX 1\n ");

for(i=0; i<r; i++)

{

for(j=0; j<c; j++)

{

printf(" %d ",a[i][j]);

}

printf("\n\n");

}

printf("\n\n\t MATRIX 2\n ");

for(i=0; i<r; i++)

{

for(j=0; j<c; j++)

{

printf(" %d ",b[i][j]);

}

printf("\n\n");

}

printf("\n\n\t SUM IS \n ");

for(i=0; i<r; i++)

{

for(j=0; j<c; j++)

{

printf(" %d ",sum[i][j]);

}

printf("\n\n");

}

getch();

}

OUTPUT:

Enter row and column you want =>3,3

Enter a[0][0] =>2

Enter a[0][1] =>3

Enter a[0][2] =>5

Enter a[1][0] =>6

Enter a[1][1] =>7

Enter a[1][2] =>8

Enter a[2][0] =>4

Enter a[2][1] =>1

Enter a[2][2] =>2

Enter b[0][0] =>3

Enter b[0][1] =>5

Enter b[0][2] =>6

Enter b[1][0] =>7

Enter b[1][1] =>8

Enter b[1][2] =>5

Enter b[2][0] =>4

Enter b[2][1] =>3

Enter b[2][2] =>5

MATRIX 1

2 3 5

6 7 8

4 1 2

MATRIX 2

3 5 6

7 8 5

4 3 5

SUM IS

5 8 11

13 15 13

1. 4 7
2. Perform the matrix subtraction of the above two matrixes (mentioned in Program No:1 ) and store the answer in the third 3X3 matrix named as matrix3.

#include<stdio.h>

#include<conio.h>

void main()

{

int a[20][30],b[20][30],sub[20][30], r,c,i,j;

clrscr();

printf("\n\n\t Enter row and column you want =>");

scanf("%d,%d",&r,&c);

// READ

for(i=0; i<r; i++)

{

for(j=0; j<c; j++)

{

printf("\n\t Enter a[%d][%d] =>",i,j);

scanf("%d",&a[i][j]);

}

}

for(i=0; i<r; i++)

{

for(j=0; j<c; j++)

{

printf("\n\t Enter b[%d][%d] =>",i,j);

scanf("%d",&b[i][j]);

}

}

for(i=0; i<r; i++)

{

for(j=0; j<c; j++)

{

sub[i][j] = a[i][j] - b[i][j];

}

}

// PRINT

clrscr();

printf("\n\n\t MATRIX 1\n ");

for(i=0; i<r; i++)

{

for(j=0; j<c; j++)

{

printf(" %d ",a[i][j]);

}

printf("\n\n");

}

printf("\n\n\t MATRIX 2\n ");

for(i=0; i<r; i++)

{

for(j=0; j<c; j++)

{

printf(" %d ",b[i][j]);

}

printf("\n\n");

}

printf("\n\n\t SUBTRACTION IS \n ");

for(i=0; i<r; i++)

{

for(j=0; j<c; j++)

{

printf(" %d ",sub[i][j]);

}

printf("\n\n");

}

getch();

}

OUTPUT:

Enter row and column you want =>3,3

Enter a[0][0] =>6

Enter a[0][1] =>7

Enter a[0][2] =>8

Enter a[1][0] =>9

Enter a[1][1] =>8

Enter a[1][2] =>7

9Enter a[2][0] =>9

Enter a[2][1] =>8

Enter a[2][2] =>7

Enter b[0][0] =>2

Enter b[0][1] =>3

Enter b[0][2] =>4

5Enter b[1][0] =>6

7Enter b[1][1] =>7

Enter b[1][2] =>8

Enter b[2][0] =>6

Enter b[2][1] =>5

Enter b[2][2] =>4

MATRIX 1

6 7 8

9 8 7

9 8 7

MATRIX 2

2 3 4

6 7 8

6 5 4

SUBTRACTION IS

4 4 4

3 1 -1

1. 3 3
2. Perform the matrix multiplication of the above two matrixes (mentioned in Program No:1 ) and store the answer in the third 3X3 matrix named as matrix3.
3. Take the 6 students name from the user. Take the one more student name which is supposed to be searched. If it founds, print the message “Student Found” otherwise print the message “Student Does Not Found”.

#include<stdio.h>

#include<conio.h>

void main()

{

char name[20][30],key;

int i,n,flag=0;

clrscr();

printf("\n\n\t Enter size of name ");

scanf("%d",&n);

for(i=0; i<n; i++)

{

printf("\n\n\t Enter name =>");

scanf("%s",&name[i]);

}

// PRINT

clrscr();

for(i=0; i<n; i++)

{

printf("\n\n\t %s ",name[i]);

}

printf("\n\n\t Enter name u want to search ");

scanf("%s",key);

for(i=0; i<n; i++)

{

if ( stricmp(name[i],key) == 0)

{

flag = 1;

printf("\n\n\t %s FOUND ",key);

break;

}

}

if(flag == 0 )

{

printf("\n\n\t not found ");

}

getch();

}

OUTPUT :

vijau

lila

baby

shivam

Enter name u want to search vijay

not found