Question no : 8.5

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Question : Check the forward diagonal is equal to the backward diagonal

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Roll no : 5

Semester : 1

Programme : BSC(DA)

#include <stdio.h>

int main()

{

int n,i,j;

printf("Enter the size of the matrix (n x n): ");

scanf("%d", &n);

int a[n][n];

printf("Enter the elements of the a:\n");

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

{

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

{

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

}

}

printf(" Matrix :\n");

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

{

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

{

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

}

printf("\n");

}

int fs= 0;

int bs= 0;

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

{

fs+= a[i][i];

bs += a[i][n - 1 - i];

}

if (fs == bs)

{

printf("The forward diagonal is equal to the backward diagonal.\n");

} else

{

printf("The forward diagonal is NOT equal to the backward diagonal.\n");

}

return 0;

}

**Output**

