Question no : 12.3

Date : 29-11 -2024

Question: Demonstrate the usage of realloc() function for increasing and decreasing the memory size during execution.

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Semester : 1

Programme : BSC(DA)

#include <stdio.h>

#include <stdlib.h>

int main()

{

int n;

int i;

printf("Enter the number of elements: ");

scanf("%d", &n);

int \*a = (int\*)malloc(n \* sizeof(int));

printf("Enter %d elements:\n", n);

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

{

printf("Element %d: ", i + 1);

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

}

printf("\nThe entered elements are:\n");

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

{

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

}

int ns;

printf("\nEnter the new size: ");

scanf("%d", &ns);

a = (int\*)realloc(a, ns \* sizeof(int));

if (ns > n)

{

printf("Enter %d more elements:\n", ns - n);

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

{

printf("Element %d: ", i + 1);

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

}

}

printf("\nThe updated elements are:\n");

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

{

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

}

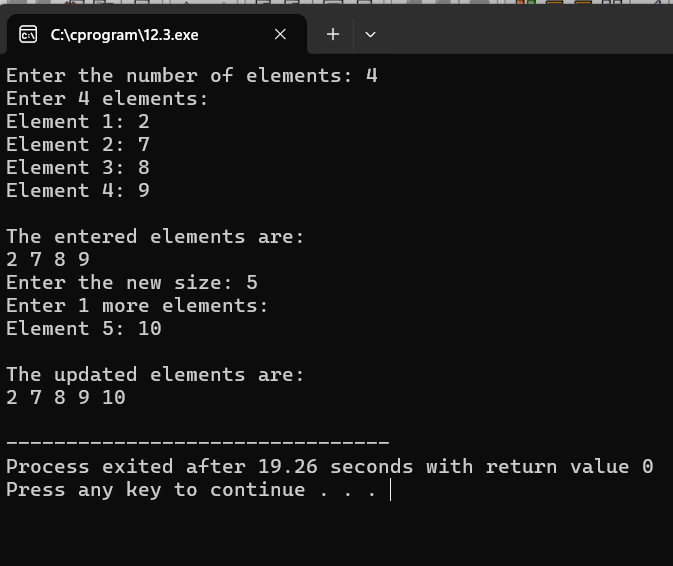
printf("\n");

free(a);

return 0;

}

**OUTPUT**

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