35. Permutations of the given array

#include <stdio.h>

void swap(int \*a, int \*b)

{

int temp = \*a;

\*a = \*b;

\*b = temp;

}

void permute(int arr[], int left, int right)

{

if (left == right)

{

for (int i = 0; i <= right; i++)

{

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

if (i != right)

{

printf(", ");

}

}

printf("\n");

}

else

{

for (int i = left; i <= right; i++)

{

swap(&arr[left], &arr[i]);

permute(arr, left + 1, right);

swap(&arr[left], &arr[i]);

}

}

}

int main()

{

int n;

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

scanf("%d", &n);

int arr[n];

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

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

{

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

}

printf("All possible permutations:\n");

permute(arr, 0, n - 1);

return 0;

}

