Write a C program to dynamically allocate memory for an array of integers of size 10.Initialize the array with the values from 1 to 10,then print the values and free the allocated memory.

#include<stdio.h>

#include<stdlib.h>>

int main() {

int \*array;

int size = 10;

array = (int \*)malloc(size \* sizeof(int));

if (array == NULL) {

printf("Memory allocation failed!\n");

return 1;

for (int i = 0; i < size; i++) {

array[i] = i + 1;

}

printf("Array values:\n");

for (int i = 0; i < size; i++) {

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

}

printf("\n");

free(array);

return 0;

}