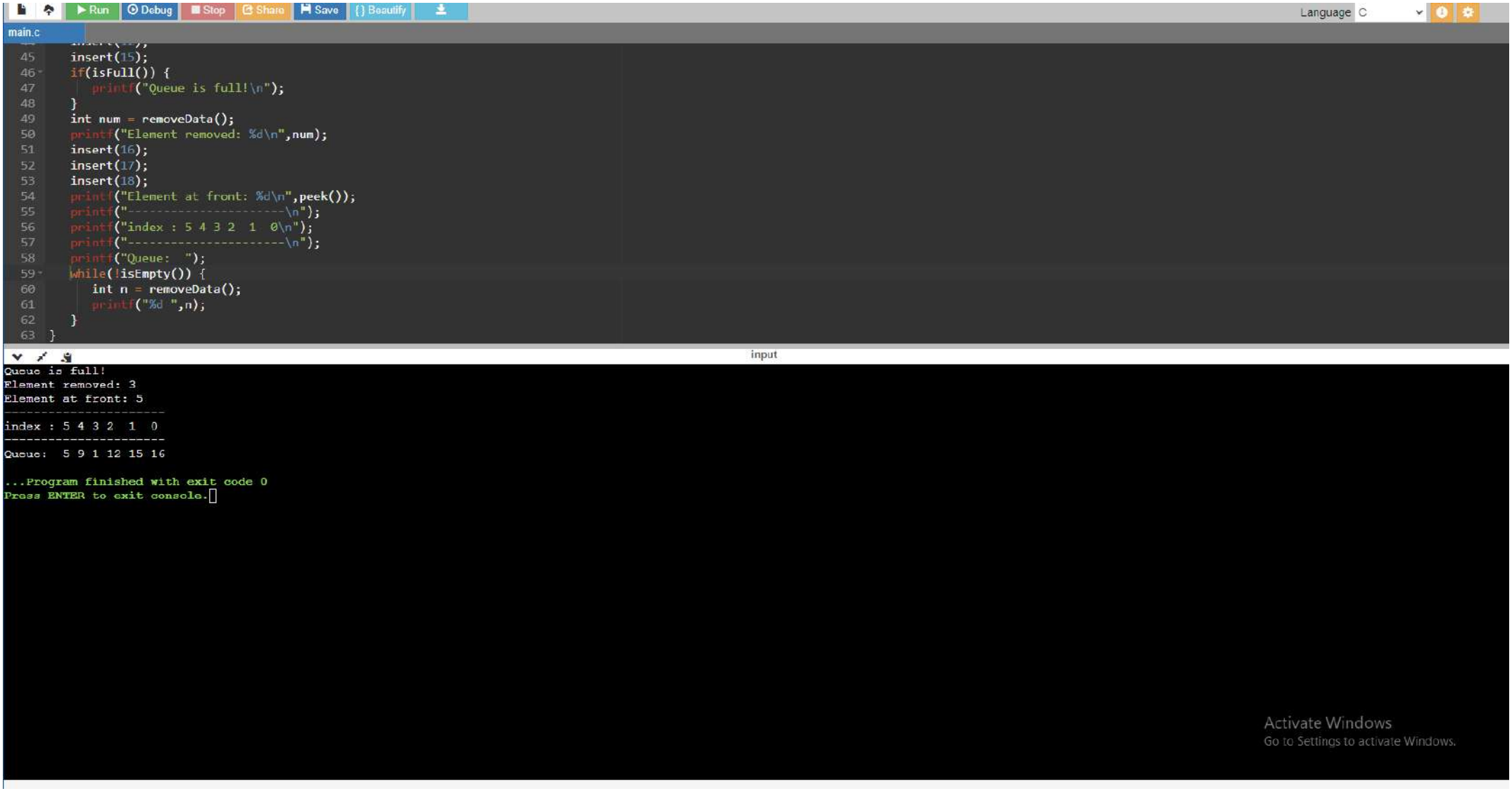
main.c

```c
#include <stdio.h>
#include <string.h>
#include <stdlib.h>
#include <stdbool.h>
#define MAX 6
int intArray[MAX];
int front = 0;
int rear = -1;
int itemCount = 0;
int peek() {
   return intArray[front];
}
bool isEmpty() {
   return itemCount == 0;
}
bool isFull() {
   return itemCount == MAX;
}
int size() {
   return itemCount;
}
void insert(int data) {
   if(!isFull()) {
      if(rear == MAX-1) {
         rear = -1;
      }
      intArray[++rear] = data;
      itemCount++;
   }
}
int removeData() {
   int data = intArray[front++];
      if(front == MAX) {
      front = 0;
   }
    itemCount--;
   return data;
}
int main() {
   insert(3);
   insert(5);
   insert(9);
   insert(1);
   insert(12);
   insert(15);
   if(isFull()) {
```


Run
Debug
Stop
Share
Save
{} Beautify
Language C
main.c
insert(15);
if(isFull()) {
printf("Queue is full!\n");
}
int num = removeData();
printf("Element removed: %d\n",num);
insert(16);
insert(17);
insert(18);
printf("Element at front: %d\n",peek());
printf("----------------------\n");
printf("index : 5 4 3 2 1 0\n");
printf("----------------------\n");
printf("Queue: ");
while(!isEmpty()) {
int n = removeData();
printf("%d ",n);
}
}
input
Queue is full!
Element removed: 3
Element at front: 5
----
index : 5 4 3 2 1 0

Queue: 5 9 1 12 15 16
...Program finished with exit code 0
Press ENTER to exit console.
Activate Windows
Go to Settings to activate Windows.