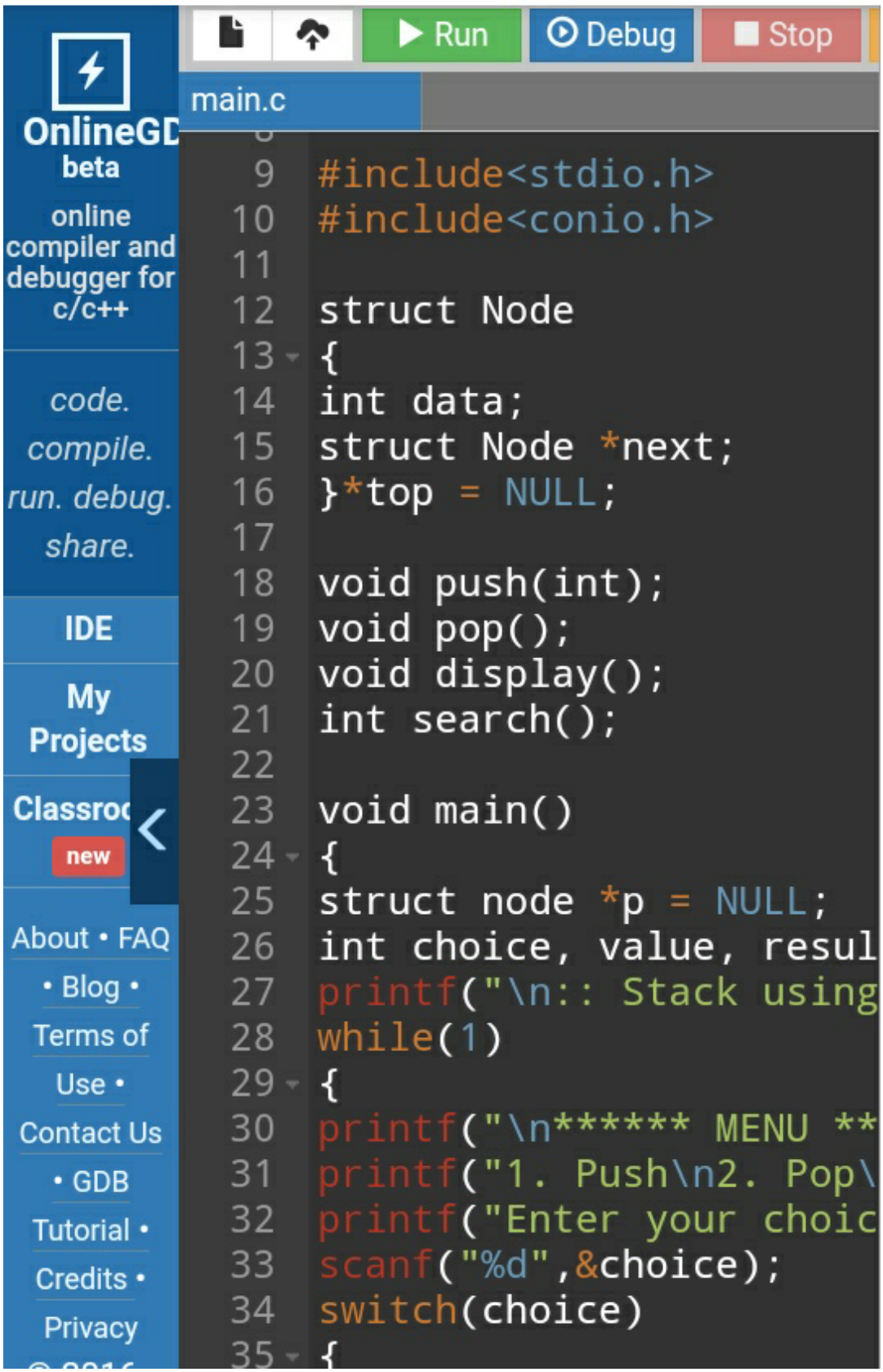
Singly Linked Stack - Push, Pop,Linear Searc...

```
#include<stdio.h>
#include<conio.h>

struct Node
{
int data;
struct Node *next;
}*top = NULL;

void push(int);
void pop();
void display();
int search();

void main()
{
struct node *p = NULL;
int choice, value, result;
printf("\n:: Stack using Linked List ::\n"); while(1)
{
printf("\n****** MENU ******\n");
printf("1. Push\n2. Pop\n3. Display\n4. Search\n5. Exit
\n");
printf("Enter your choice: ");

scanf("%d",&choice);
switch(choice)
{
```

```
case 1: printf("Enter the value to be insert:");
scanf("%d", &value);
push (value);
break;
case 2: printf("Enter the value to be delete:");
scanf("%d",&value);
pop (value);
break;
case 3: display ();
break;
case 4:printf ("Enter the value to be search:");
scanf("%d",&value);
result = search(p, value);
if (result)
{
printf("%d not found in the list.\n", value);
}
else
{
printf("%d found in the list.\n", value);
}
exit(&p);
search (value);
break;
case 5: exit ( 0 );
default: printf("\nWrong selection!!!Please try again!!!
\n");
}
}
}
```

```
void push (int value)
{
struct Node *newNode;
newNode= (struct Node*)malloc(sizeof(struct Node));

newNode->data = value;
if(top == NULL)
newNode->next = NULL;
else
newNode->next = top;
top = newNode;
printf("\nInsertion is Success!!!\n");
}
void pop (int value)
{
 if(top == NULL)
printf("\nStack is Empty!!!\n");
else
{
struct Node *temp = top;
printf("\nDeleted element: %d", temp->data);
top = temp->next;
free(temp);
}
}
void display ()
{
if(top == NULL)
printf("\nStack is Empty!!!\n");
else
```

```
{
struct Node *temp = top;
while(temp->next != NULL)
{
printf("%d--->",temp->data);
temp = temp -> next;
}
printf("%d--->NULL",temp->data);
}
}
int search (int value)
{
struct Node*temp;
temp= top;
while (temp != NULL)
{
if (temp->data != value)
{
temp = temp->next;
}
}
}
```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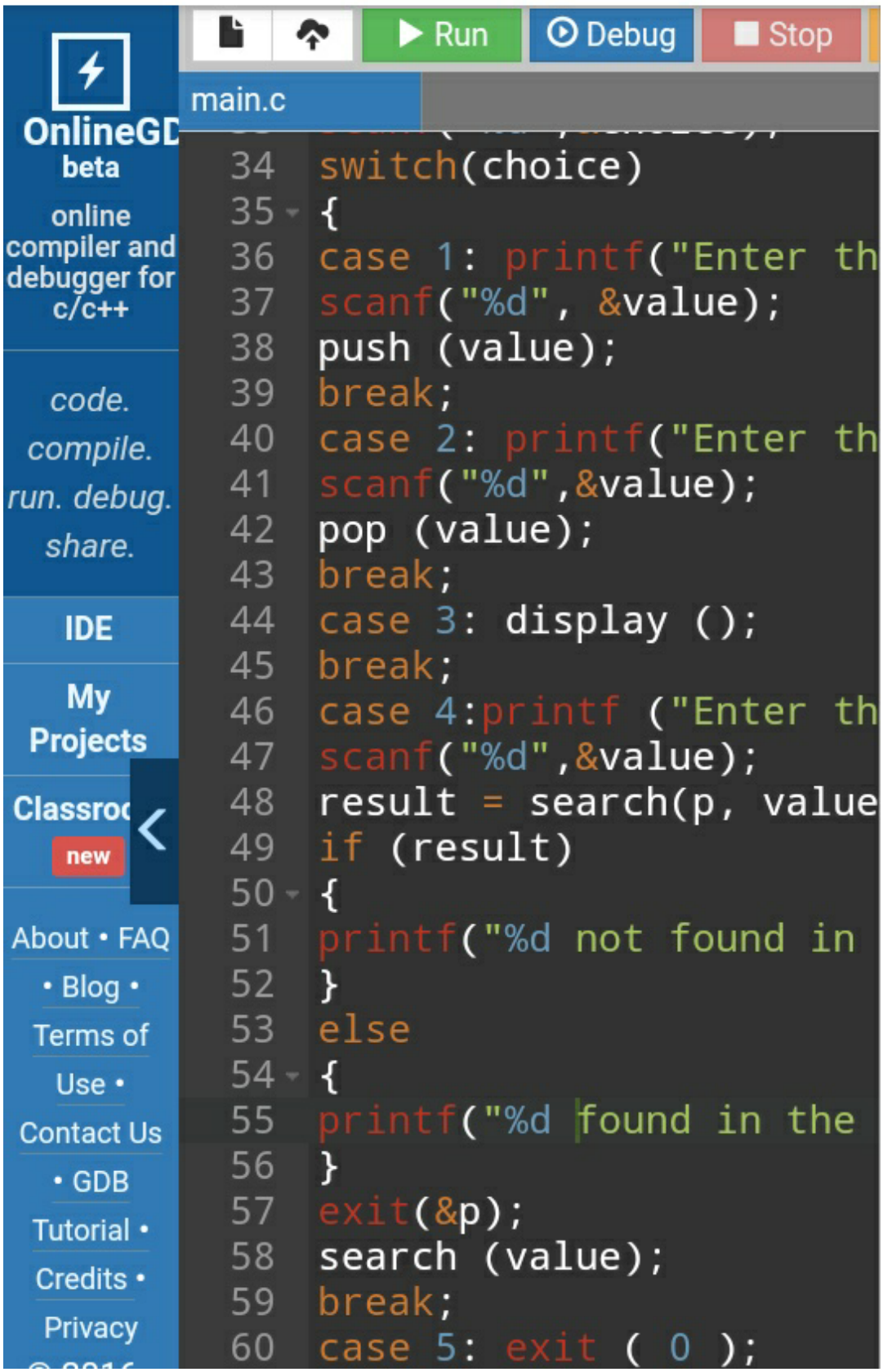
Run
Debug
Stop
main.c
#include<stdio.h>
#include<conio.h>
struct Node
{
int data;
struct Node *next;
}*top = NULL;
void push(int);
void pop();
void display();
int search();
void main()
{
struct node *p = NULL;
int choice, value, resul
printf("\n:: Stack using
while(1)
{
printf("\n****** MENU **
printf("1. Push\n2. Pop\
printf("Enter your choic
scanf("%d",&choice);
switch(choice)
{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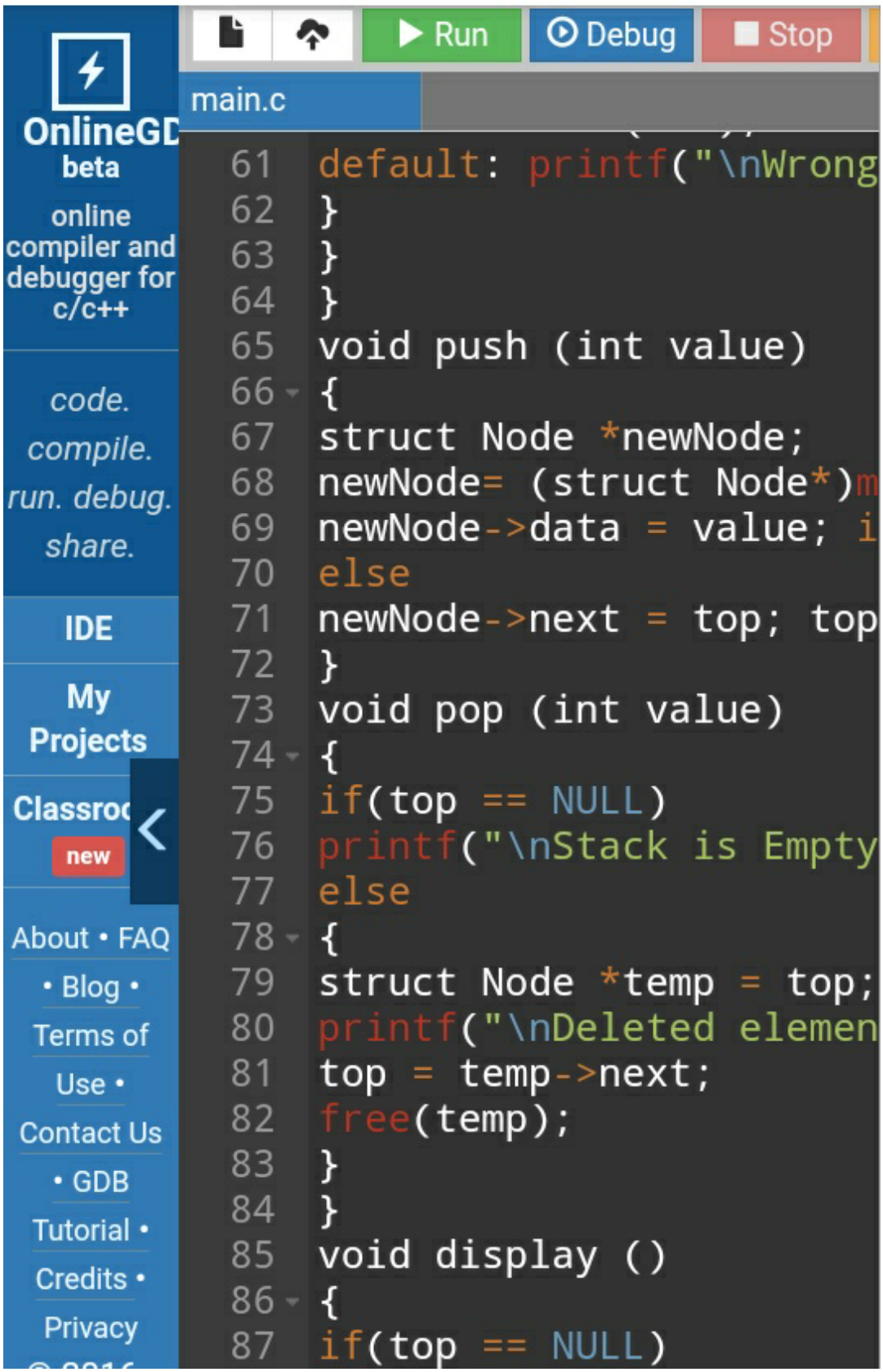
Debug
Stop
main.c
switch(choice)
{
case 1: printf("Enter th
scanf("%d", &value);
push (value);
break;
case 2: printf("Enter th
scanf("%d",&value);
pop (value);
break;
case 3: display ();
break;
case 4:printf ("Enter th
scanf("%d",&value);
result = search(p, value
if (result)
{
printf("%d not found in
}
else
{
printf("%d found in the
}
exit(&p);
search (value);
break;
case 5: exit (0);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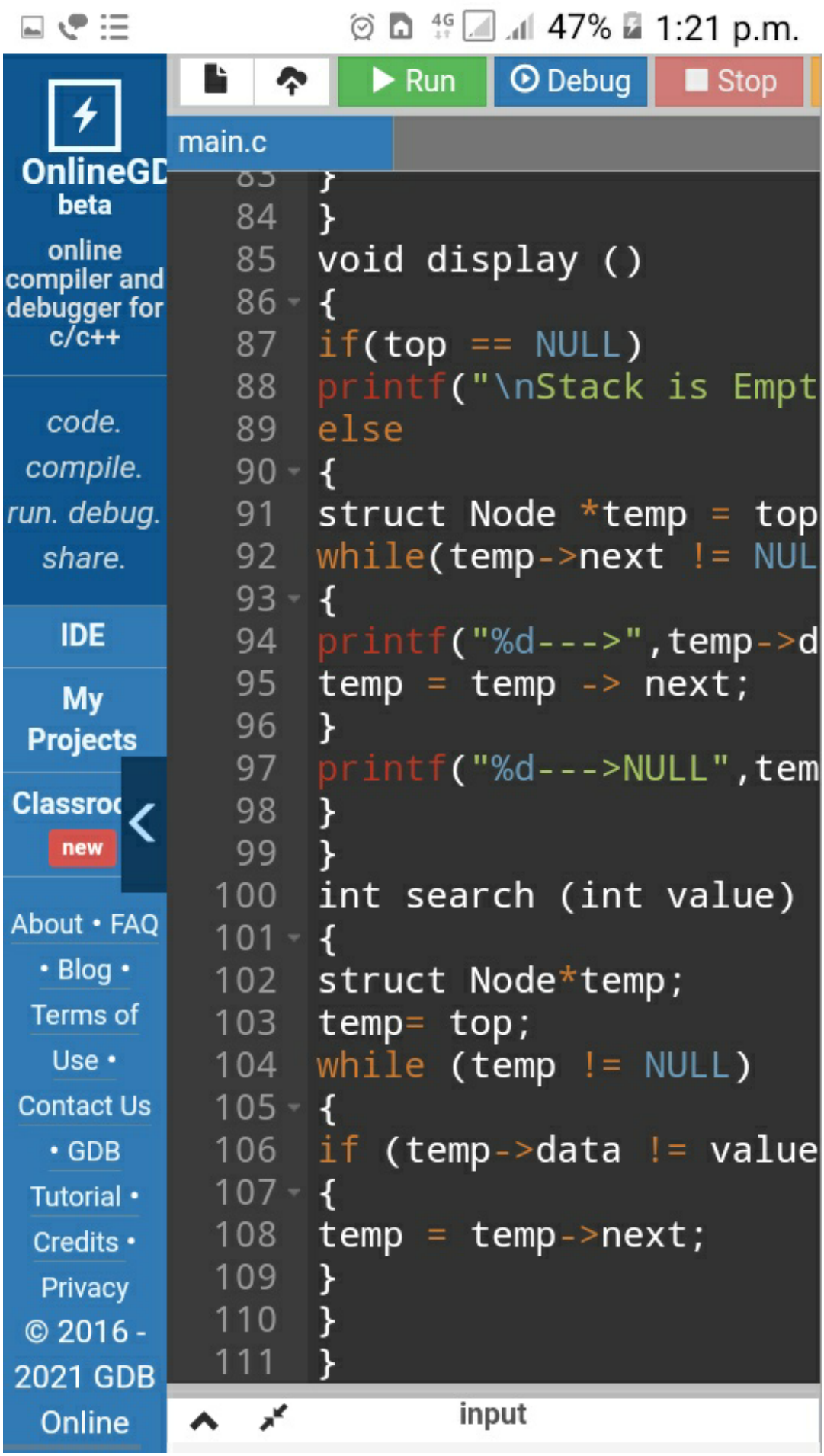
Run
Debug
Stop
main.c
61 default: printf("\nWrong
62 }
63 }
64 }
65 void push (int value)
66 {
67 struct Node *newNode;
68 newNode= (struct Node*)m
69 newNode->data = value; i
70 else
71 newNode->next = top; top
72 }
73 void pop (int value)
74 {
75 if(top == NULL)
76 printf("\nStack is Empty
77 else
78 {
79 struct Node *temp = top;
80 printf("\nDeleted elemen
81 top = temp->next;
82 free(temp);
83 }
84 }
85 void display ()
86 {
87 if(top == NULL)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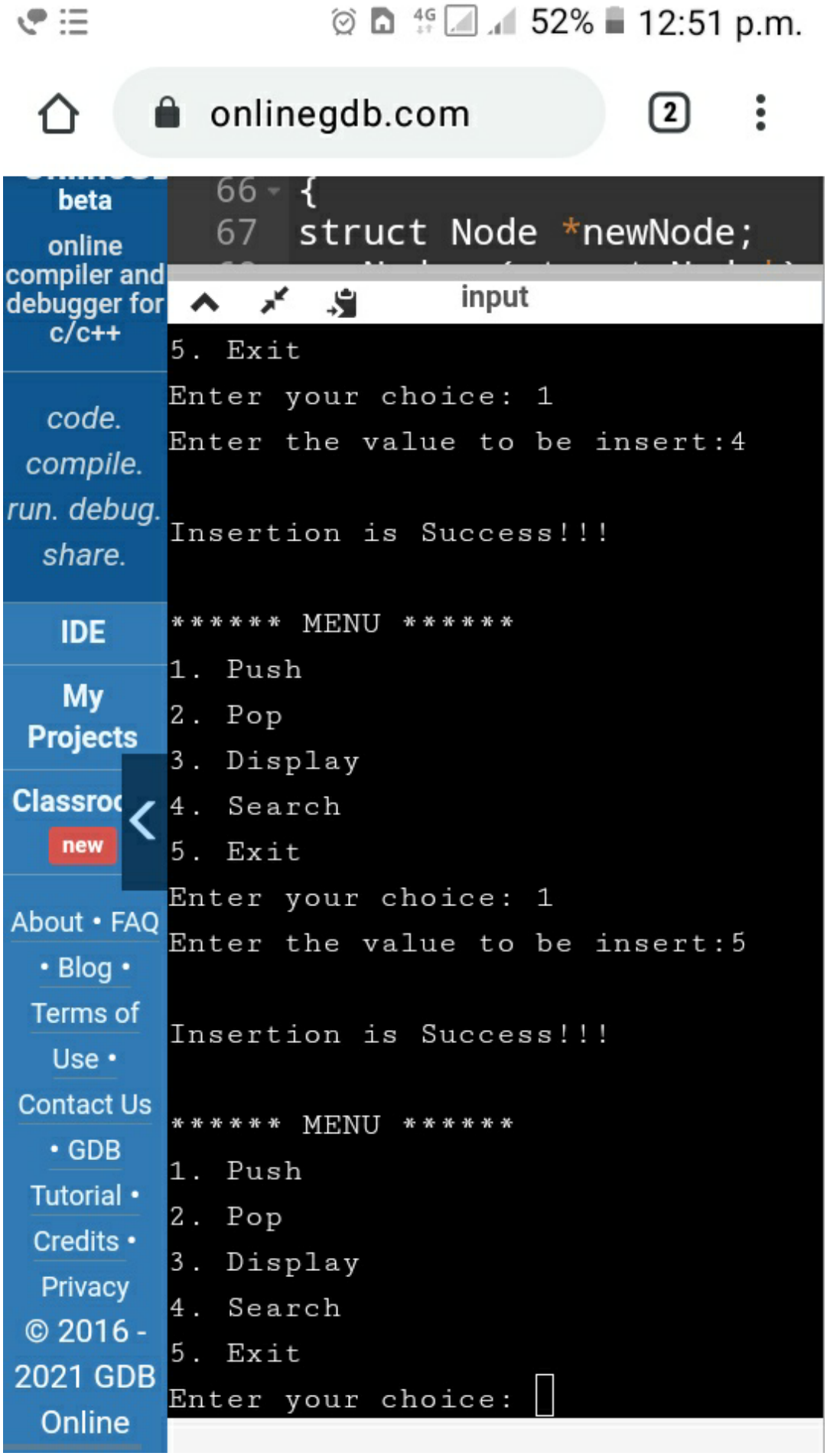
Run
Debug
Stop
main.c
}
}
void display ()
{
if(top == NULL)
printf("\nStack is Empt
else
{
struct Node *temp = top
while(temp->next != NUL
{
printf("%d--->",temp->d
temp = temp -> next;
}
printf("%d--->NULL",tem
}
}
int search (int value)
{
struct Node*temp;
temp= top;
while (temp != NULL)
{
if (temp->data != value
{
temp = temp->next;
}
}
}
input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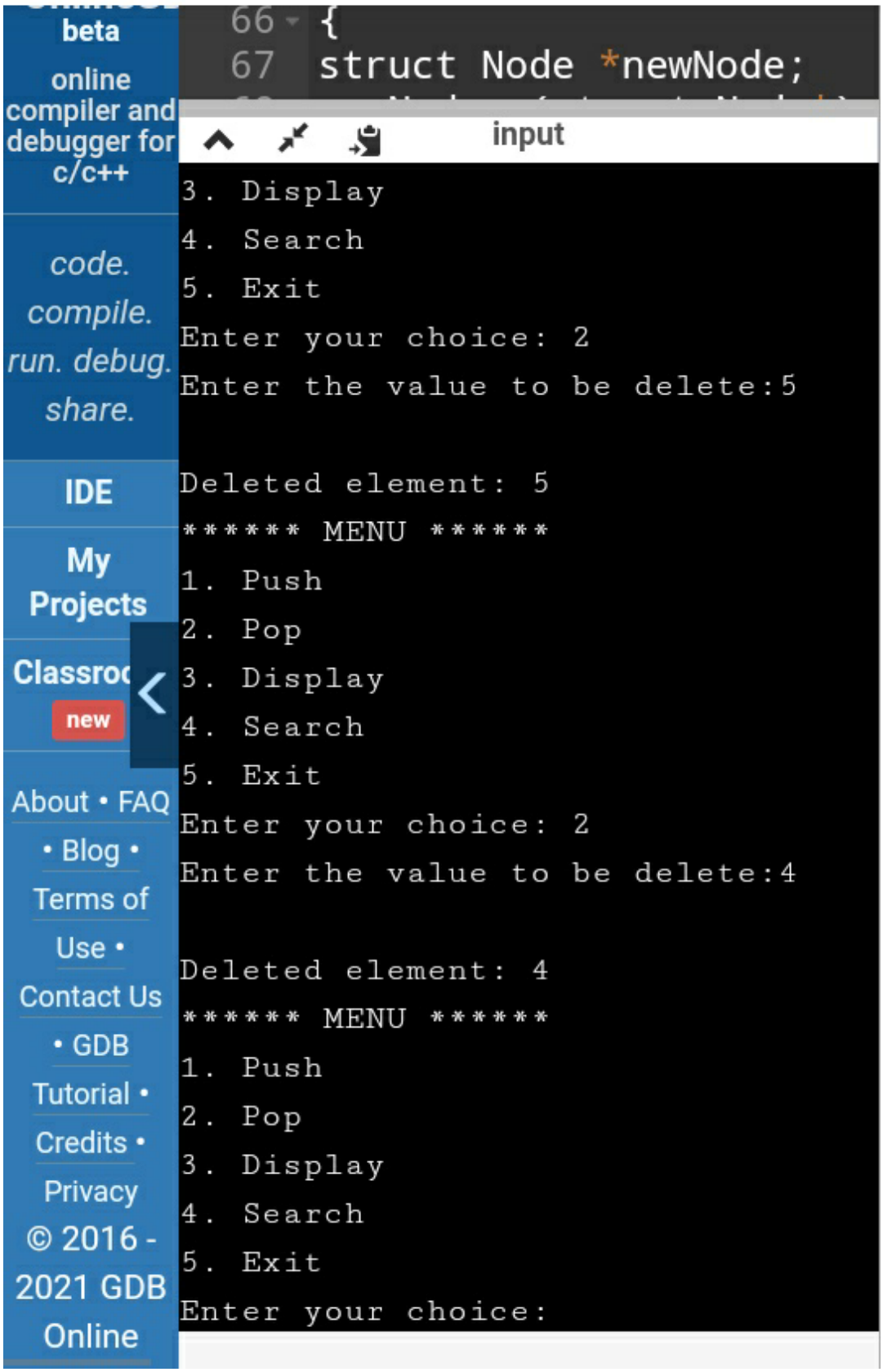
66 {
67 struct Node *newNode;
input
5. Exit
Enter your choice: 1
Enter the value to be insert:4
Insertion is Success!!!
****** MENU ******
1. Push
2. Pop
3. Display
4. Search
5. Exit
Enter your choice: 1
Enter the value to be insert:5
Insertion is Success!!!
****** MENU ******
1. Push
2. Pop
3. Display
4. Search
5. Exit
Enter your choice: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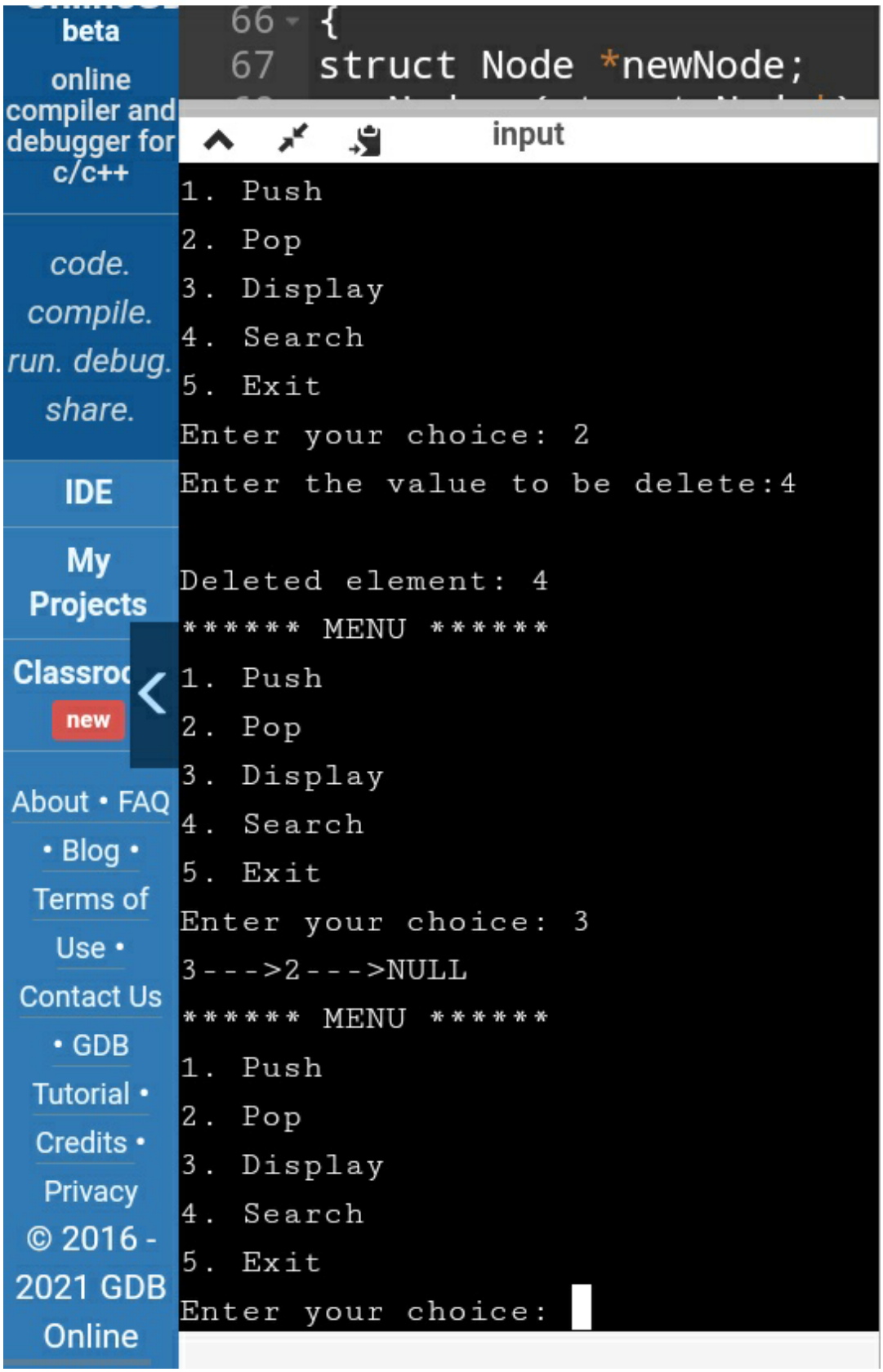
66 {
67 struct Node *newNode;
input
3. Display
4. Search
5. Exit
Enter your choice: 2
Enter the value to be delete:5
Deleted element: 5
****** MENU ******
1. Push
2. Pop
3. Display
4. Search
5. Exit
Enter your choice: 2
Enter the value to be delete:4
Deleted element: 4
****** MENU ******
1. Push
2. Pop
3. Display
4. Search
5. Exit
Enter your choice: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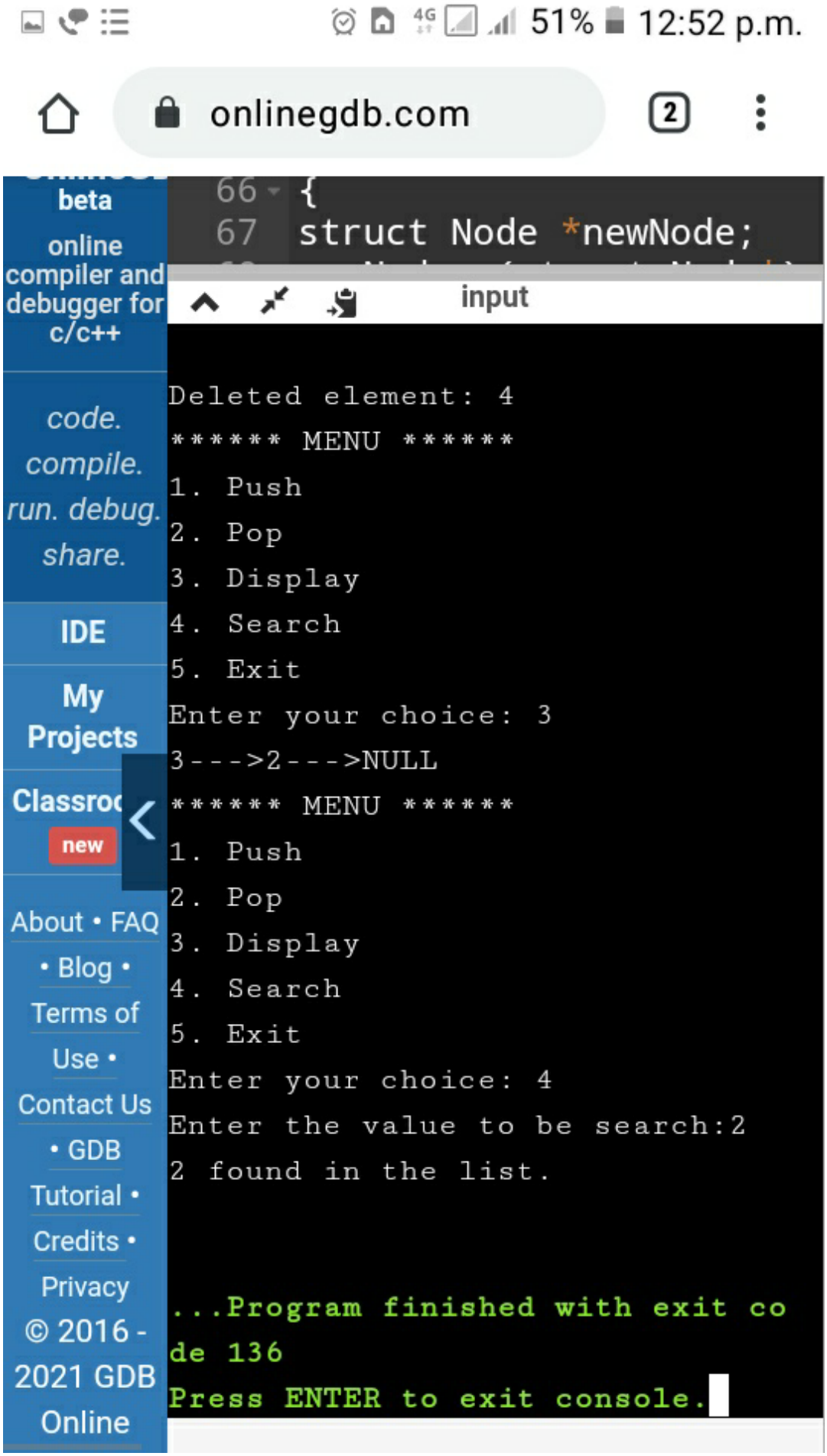
66 {
67 struct Node *newNode;
input
1. Push
2. Pop
3. Display
4. Search
5. Exit
Enter your choice: 2
Enter the value to be delete:4
Deleted element: 4
****** MENU ******
1. Push
2. Pop
3. Display
4. Search
5. Exit
Enter your choice: 3
3--->2--->NULL
****** MENU ******
1. Push
2. Pop
3. Display
4. Search
5. Exit
Enter your choice: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66 {
67 struct Node *newNode;
input
Deleted element: 4
****** MENU ******
1. Push
2. Pop
3. Display
4. Search
5. Exit
Enter your choice: 3
3--->2--->NULL
****** MENU ******
1. Push
2. Pop
3. Display
4. Search
5. Exit
Enter your choice: 4
Enter the value to be search:2
2 found in the list.
...Program finished with exit code 136
Press ENTER to exit console.