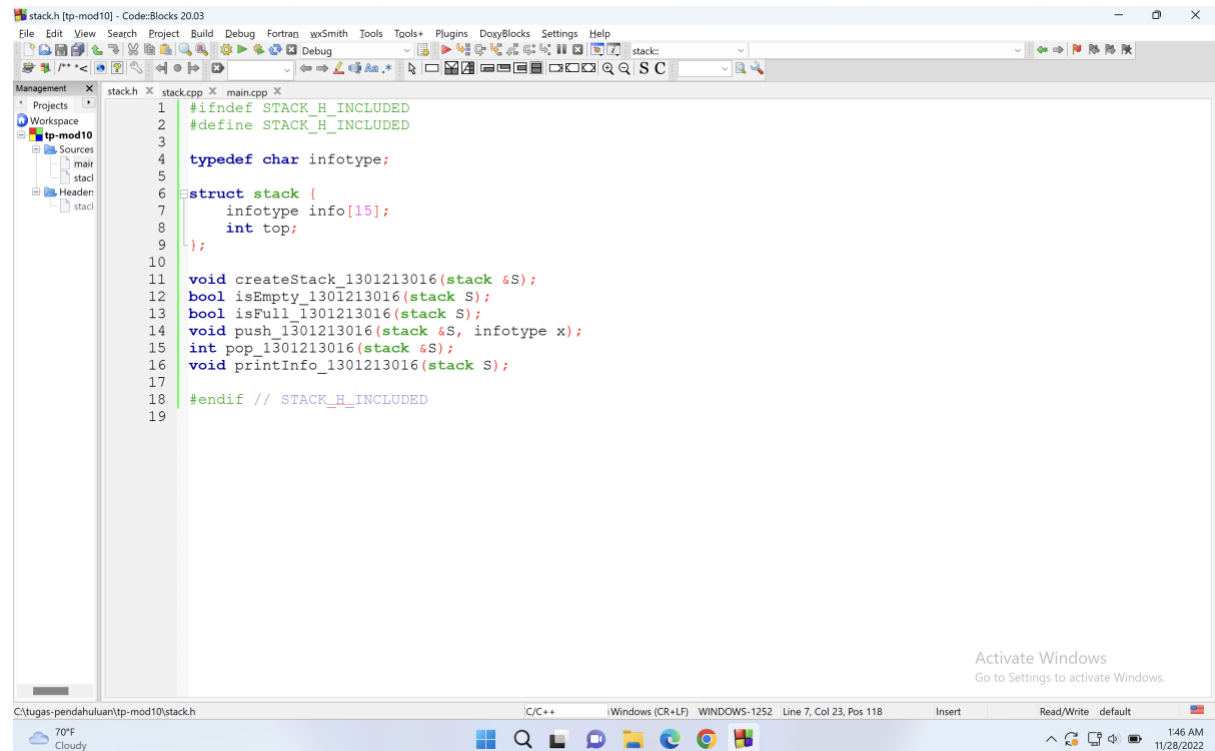


Nama : Fawaz Al Rasyid

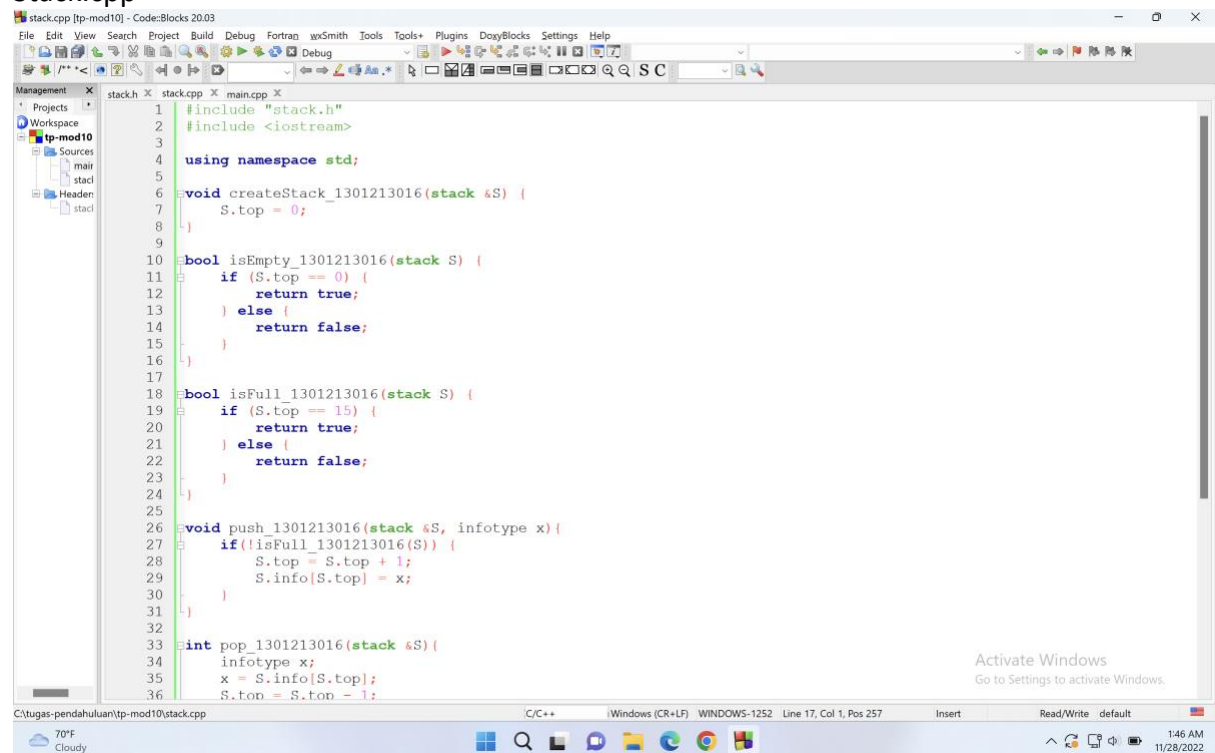
NIM : 1301213016

Stack.h



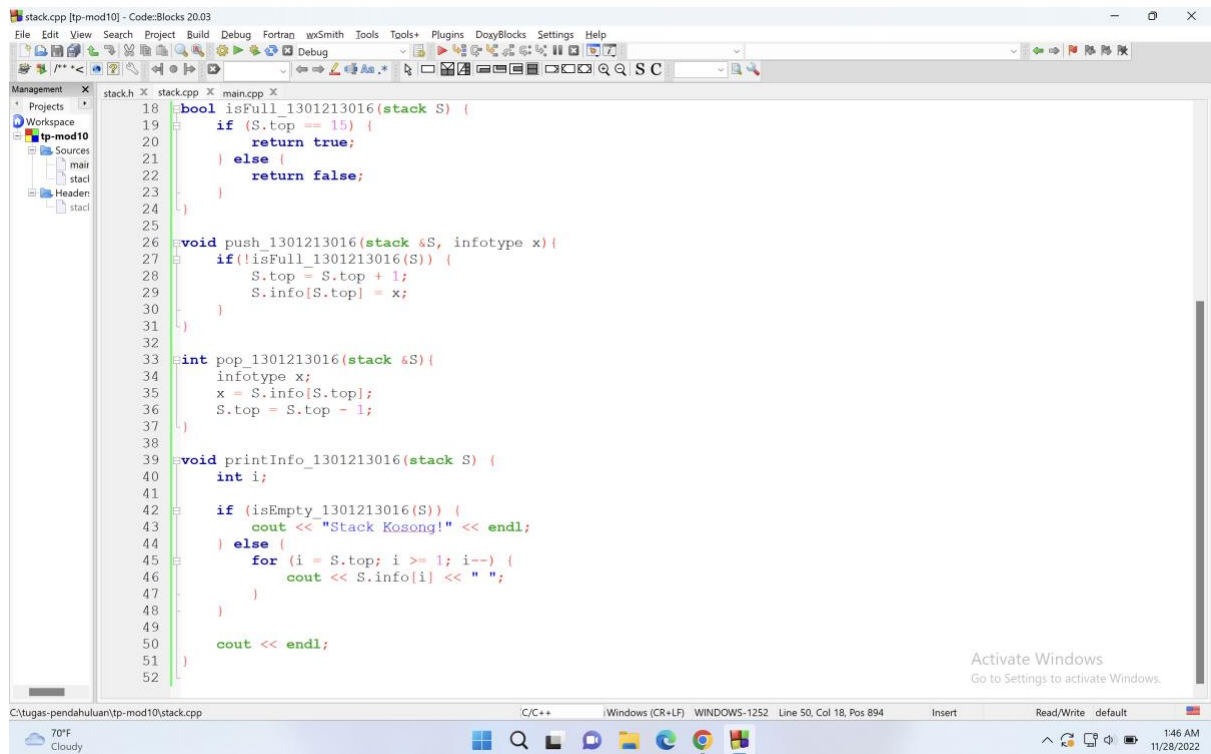
```
1 #ifndef STACK_H_INCLUDED
2 #define STACK_H_INCLUDED
3
4 typedef char infotype;
5
6 struct stack {
7     infotype info[15];
8     int top;
9 };
10
11 void createStack_1301213016(stack &S);
12 bool isEmpty_1301213016(stack S);
13 bool isFull_1301213016(stack S);
14 void push_1301213016(stack &S, infotype x);
15 int pop_1301213016(stack &S);
16 void printInfo_1301213016(stack S);
17
18 #endif // STACK_H_INCLUDED
19
```

Stack.cpp



```
1 #include "stack.h"
2 #include <iostream>
3
4 using namespace std;
5
6 void createStack_1301213016(stack &S) {
7     S.top = 0;
8 }
9
10 bool isEmpty_1301213016(stack S) {
11     if (S.top == 0) {
12         return true;
13     } else {
14         return false;
15     }
16 }
17
18 bool isFull_1301213016(stack S) {
19     if (S.top == 15) {
20         return true;
21     } else {
22         return false;
23     }
24 }
25
26 void push_1301213016(stack &S, infotype x) {
27     if (!isFull_1301213016(S)) {
28         S.top = S.top + 1;
29         S.info[S.top] = x;
30     }
31 }
32
33 int pop_1301213016(stack &S) {
34     infotype x;
35     x = S.info[S.top];
36     S.top = S.top - 1;
37 }

```

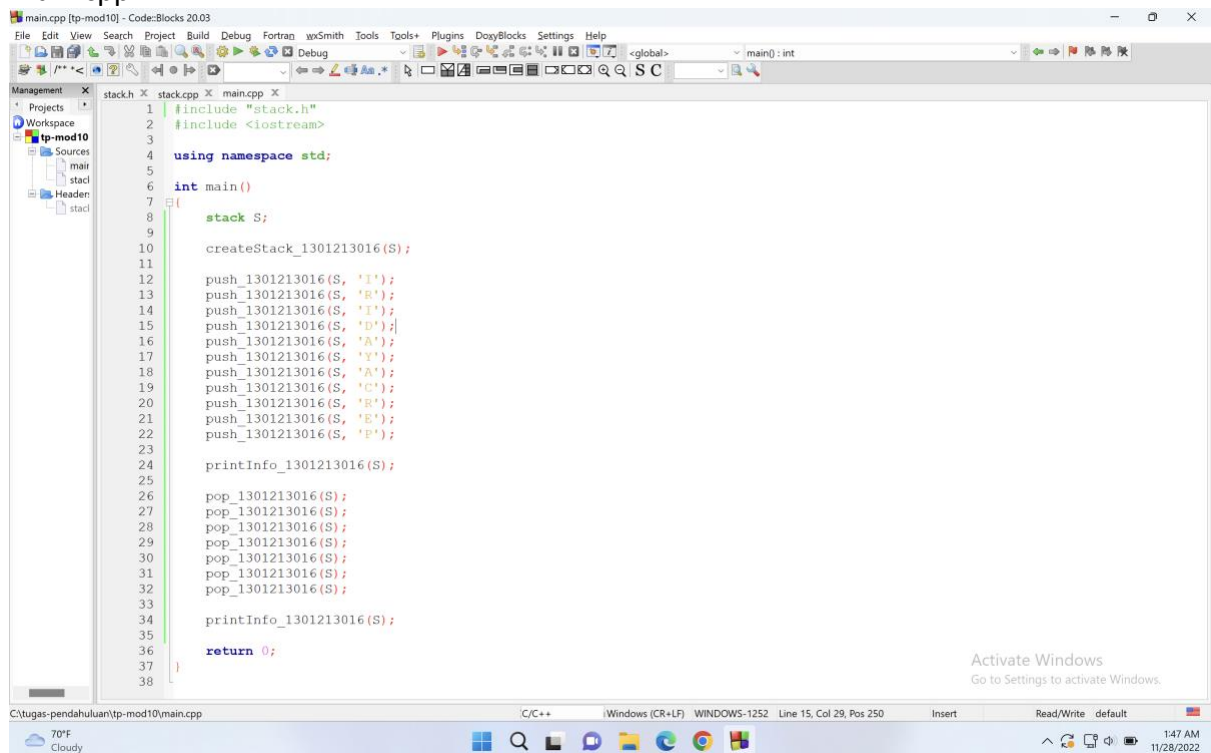


The screenshot shows the Code::Blocks 20.03 IDE with the file stack.cpp open. The left sidebar shows a project named 'tp-mod10' with source files 'main.cpp', 'stack.h', and 'stack.cpp'. The main editor displays the implementation of a stack in C++.

```
18 bool isFull_1301213016(stack S) {
19     if (S.top == 15) {
20         return true;
21     } else {
22         return false;
23     }
24 }
25
26 void push_1301213016(stack &S, infotype x) {
27     if (!isFull_1301213016(S)) {
28         S.top = S.top + 1;
29         S.info[S.top] = x;
30     }
31 }
32
33 int pop_1301213016(stack &S) {
34     infotype x;
35     x = S.info[S.top];
36     S.top = S.top - 1;
37 }
38
39 void printInfo_1301213016(stack S) {
40     int i;
41
42     if (isEmpty_1301213016(S)) {
43         cout << "Stack Kosong!" << endl;
44     } else {
45         for (i = S.top; i >= 1; i--) {
46             cout << S.info[i] << " ";
47         }
48     }
49
50     cout << endl;
51 }
52 }
```

The status bar at the bottom indicates the file path is C:\tugas-pendahuluan\tp-mod10\stack.cpp, the compiler is C/C++, and the window title is WINDOWS-1252. The system tray shows the date and time as 1:46 AM on 11/28/2022.

Main.cpp



The screenshot shows the Code::Blocks 20.03 IDE with the file main.cpp open. The left sidebar shows the same project 'tp-mod10' with source files 'main.cpp', 'stack.h', and 'stack.cpp'. The main editor displays the main function in C++.

```
1 #include "stack.h"
2 #include <iostream>
3
4 using namespace std;
5
6 int main()
7 {
8     stack S;
9
10    createStack_1301213016(S);
11
12    push_1301213016(S, 'I');
13    push_1301213016(S, 'R');
14    push_1301213016(S, 'I');
15    push_1301213016(S, 'D');
16    push_1301213016(S, 'A');
17    push_1301213016(S, 'Y');
18    push_1301213016(S, 'A');
19    push_1301213016(S, 'C');
20    push_1301213016(S, 'R');
21    push_1301213016(S, 'E');
22    push_1301213016(S, 'P');
23
24    printInfo_1301213016(S);
25
26    pop_1301213016(S);
27    pop_1301213016(S);
28    pop_1301213016(S);
29    pop_1301213016(S);
30    pop_1301213016(S);
31    pop_1301213016(S);
32
33    printInfo_1301213016(S);
34
35    return 0;
36 }
37
38 }
```

The status bar at the bottom indicates the file path is C:\tugas-pendahuluan\tp-mod10\main.cpp, the compiler is C/C++, and the window title is WINDOWS-1252. The system tray shows the date and time as 1:47 AM on 11/28/2022.

Output

```
C:\kugas-pendahuluan\tp-mod10\bin\Debug\tp-mod10.exe
P E R C A Y A D I R I
D I R I

Process returned 0 (0x0)   execution time : 0.047 s
Press any key to continue.
```

Activate Windows
Go to Settings to activate Windows.

70°F
Cloudy

1:42 AM
11/28/2022