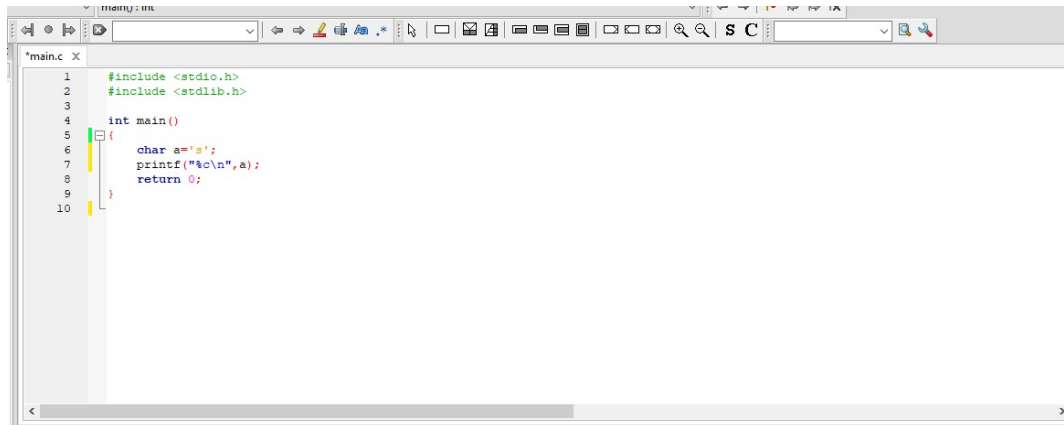


Introduction to programming

Assignment 1

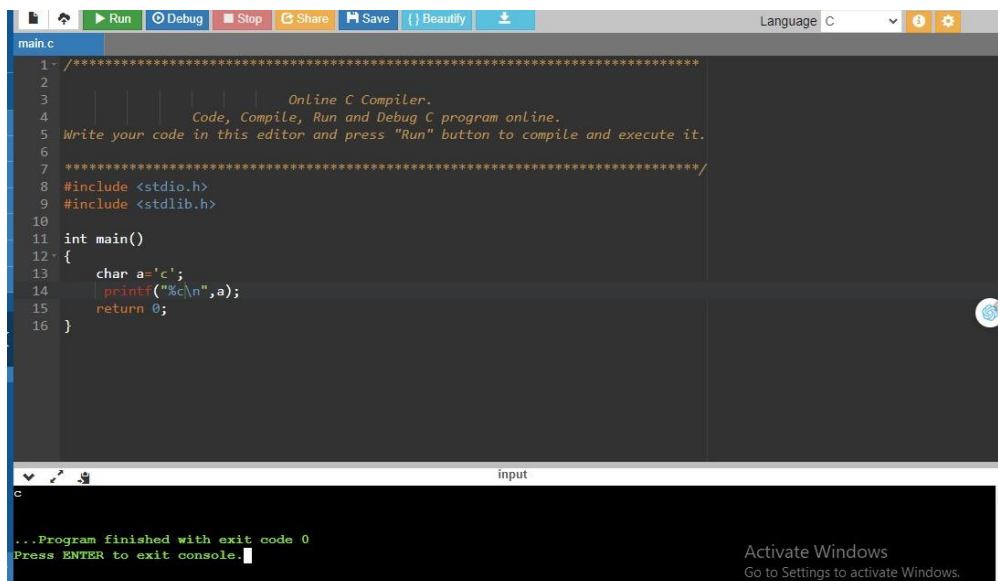
Mona Eid Yiehia

1.write a C Program to test different format Specifiers with "Printf".



A screenshot of a code editor window titled 'main.c'. The code is as follows:

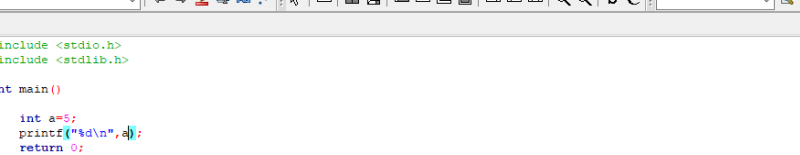
```
1 #include <stdio.h>
2 #include <stdlib.h>
3
4 int main()
5 {
6     char a='a';
7     printf("%c\n",a);
8     return 0;
9 }
10
```



A screenshot of an online C compiler interface. The code editor shows the same program as the first image, but with additional comments at the top:

```
1- /*****
2- |           |           |           |           |
3- |           |           |           |           | Online C Compiler.
4- |           |           |           |           | Code, Compile, Run and Debug C program online.
5- |           |           |           |           | Write your code in this editor and press "Run" button to compile and execute it.
6- |           |           |           |           | *****/
7- *****/
8 #include <stdio.h>
9 #include <stdlib.h>
10
11 int main()
12 {
13     char a='c';
14     printf("%c\n",a);
15     return 0;
16 }
```

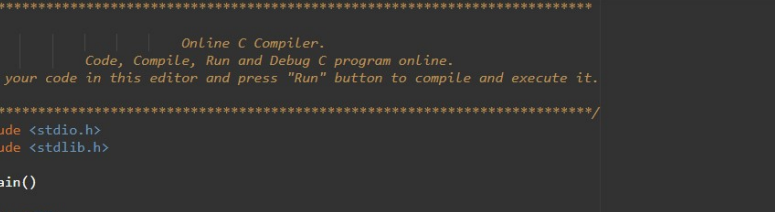
Below the code editor is an 'input' field and an output window. The output window displays the message: "...Program finished with exit code 0" and "Press ENTER to exit console.".



The screenshot shows a C code editor with a file named `main.c`. The code is as follows:

```
1 #include <stdio.h>
2 #include <stdlib.h>
3
4 int main()
5 {
6     int a=5;
7     printf("%d\n",a);
8     return 0;
9 }
10
```

The editor interface includes a toolbar at the top with various icons for file operations, editing, and running. The file name `main.c` is visible in the top-left corner of the editor window.




```
1- ./*****
2
3      Online C Compiler.
4      Code, Compile, Run and Debug C program online.
5      Write your code in this editor and press "Run" button to compile and execute it.
6
7      *****/
8      #include <stdio.h>
9      #include <stdlib.h>
10
11      int main()
12      {
13          int a=10;
14          printf("%d\n",a);
15          return 0;
16      }
```

input

10

...Program finished with exit code 0
Press ENTER to exit console.

Activate Windows
Go to Settings to activate Windows.



```
1 #include <stdio.h>
2 #include <stdlib.h>
3
4 int main()
5 {
6     float a=6;
7     printf("%f\n",a);
8     return 0;
9 }
10
```

RunDebugStopShareSaveBeautify

LanguageC

main.c

```
1  /******
2
3      OnLine C Compiler.
4      Code, Compile, Run and Debug C program online.
5      Write your code in this editor and press "Run" button to compile and execute it.
6      *****/
7
8      #include <stdio.h>
9      #include <stdlib.h>
10
11     int main()
12     {
13         float a=10;
14         printf("%f\n",a);
15         return 0;
16     }
```

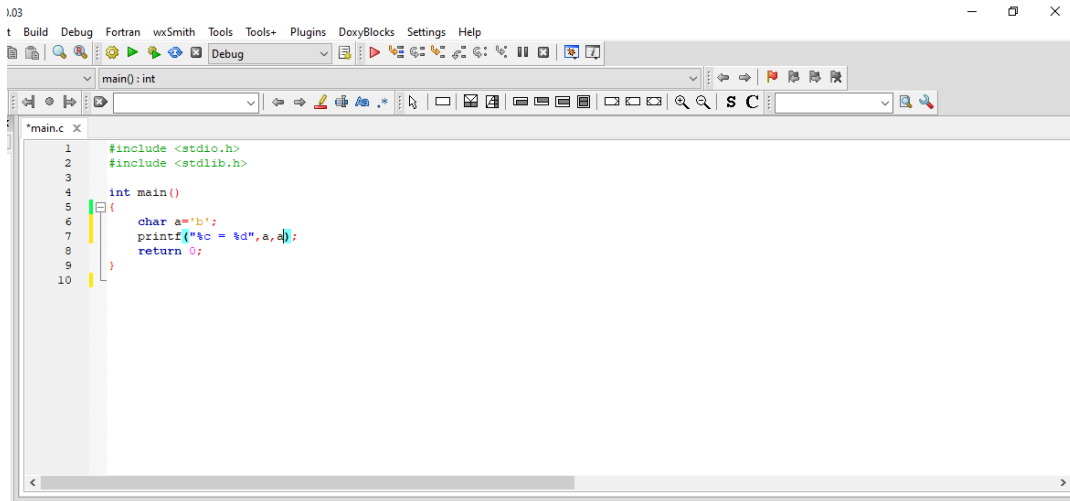
Input

```
10.000000

...Program finished with exit code 0
Press ENTER to exit console.
```

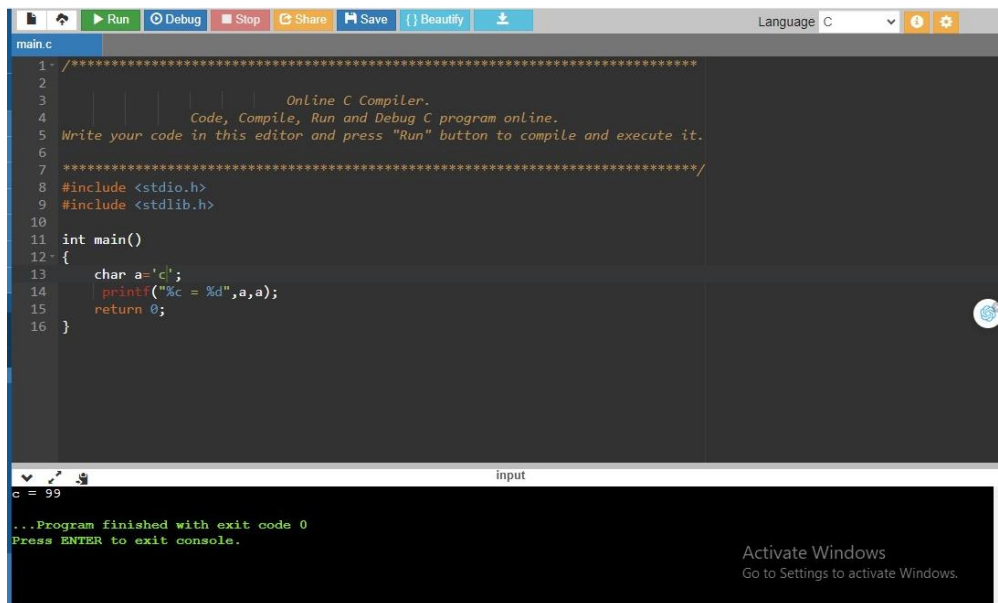
Activate Windows
Go to Settings to activate Windows.

2. write a C Program to print ASCII number of a given char.



A screenshot of a code editor window showing a C program. The program includes `<stdio.h>` and `<stdlib.h>`, defines a `main` function, declares a character `a` as `'b'`, and uses `printf` to print the ASCII value of `a` as `"%c = %d"`. The output is `b = 98`.

```
1 #include <stdio.h>
2 #include <stdlib.h>
3
4 int main()
5 {
6     char a='b';
7     printf("%c = %d",a,a);
8     return 0;
9 }
10
```



A screenshot of an online C compiler interface. The code editor shows a C program that includes `<stdio.h>` and `<stdlib.h>`, defines a `main` function, declares a character `a` as `'c'`, and uses `printf` to print the ASCII value of `a` as `"%c = %d"`. The output is `c = 99`. The interface also includes a toolbar with buttons for Run, Debug, Stop, Share, Save, and Beautify, and a status bar at the bottom indicating the program finished with exit code 0.

```
1 /*****
2
3 Online C Compiler.
4 Code, Compile, Run and Debug C program online.
5 Write your code in this editor and press "Run" button to compile and execute it.
6 *****/
7
8 #include <stdio.h>
9 #include <stdlib.h>
10
11 int main()
12 {
13     char a='c';
14     printf("%c = %d",a,a);
15     return 0;
16 }
```

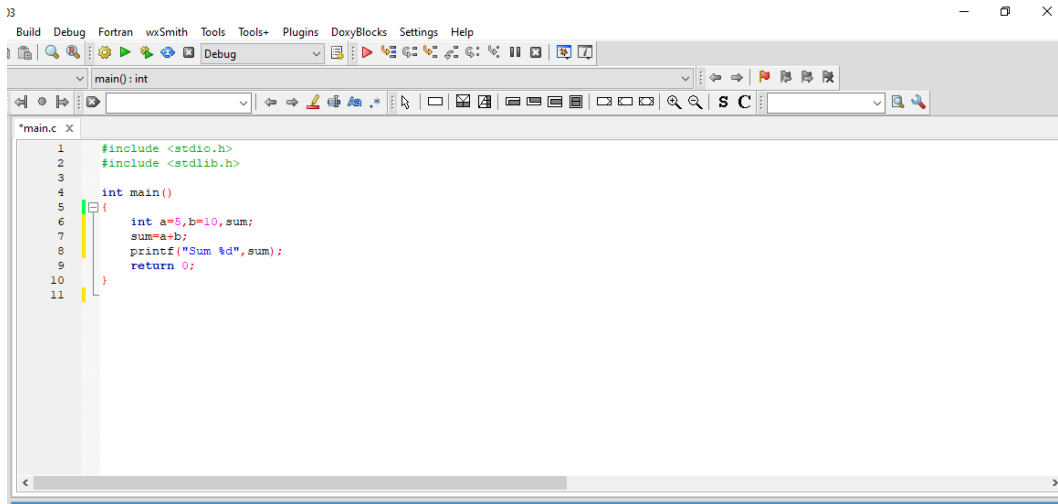
input

c = 99

...Program finished with exit code 0
Press ENTER to exit console.

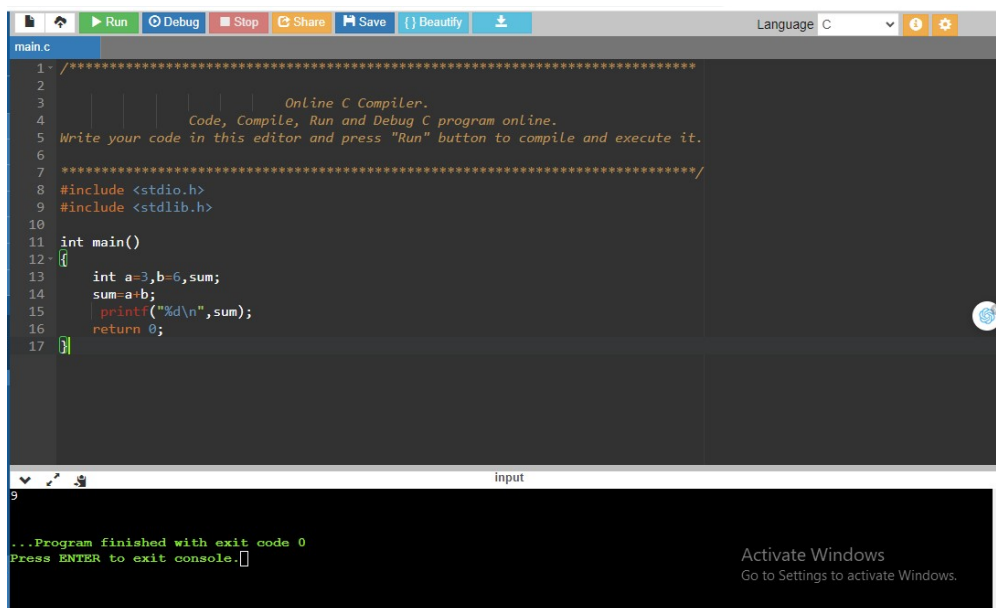
Activate Windows
Go to Settings to activate Windows.

3. write a C Program to add two integers.



A screenshot of a code editor window showing a C program. The menu bar includes Build, Debug, Fortran, wxSmith, Tools, Tools+, Plugins, DoxyBlocks, Settings, and Help. The toolbar contains icons for file operations, execution, and search. The editor displays the following code:

```
*main.c X
1  #include <stdio.h>
2  #include <stdlib.h>
3
4  int main()
5  {
6      int a=5,b=10,sum;
7      sum=a+b;
8      printf("Sum %d",sum);
9      return 0;
10 }
11
```



A screenshot of an online C compiler interface. The top bar includes buttons for Run, Debug, Stop, Share, Save, Beautify, and a Language dropdown set to C. The editor shows the following code:

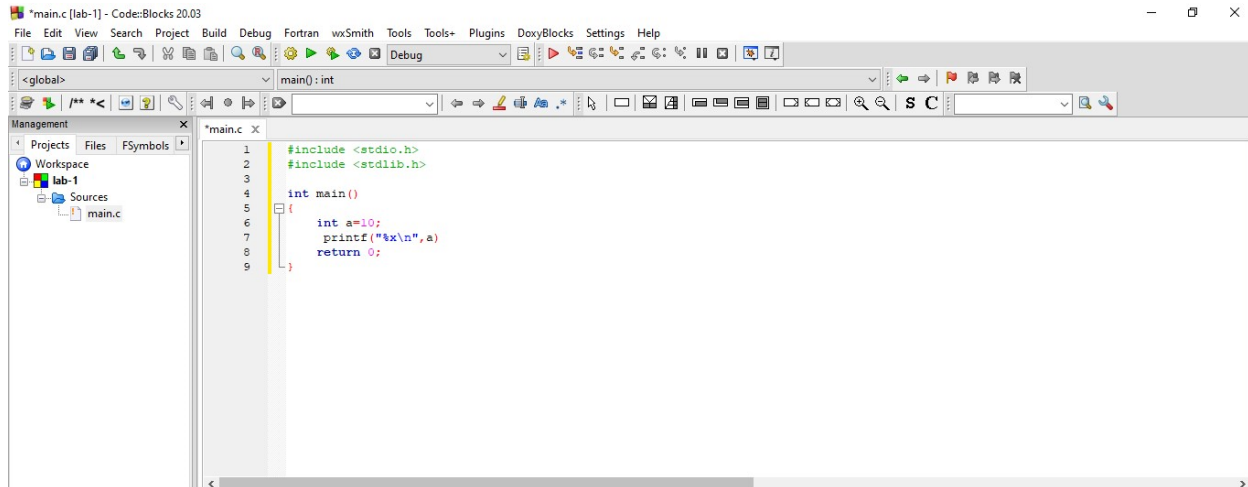
```
main.c
1  /* *****
2
3      Online C Compiler.
4      Code, Compile, Run and Debug C program online.
5      Write your code in this editor and press "Run" button to compile and execute it.
6
7  ***** */
8  #include <stdio.h>
9  #include <stdlib.h>
10
11 int main()
12 {
13     int a=3,b=6,sum;
14     sum=a+b;
15     printf("%d\n",sum);
16     return 0;
17 }
```

Below the editor is an input field and a console window. The console displays the output:

```
...Program finished with exit code 0
Press ENTER to exit console.
```

An "Activate Windows" watermark is visible in the bottom right corner of the console area.

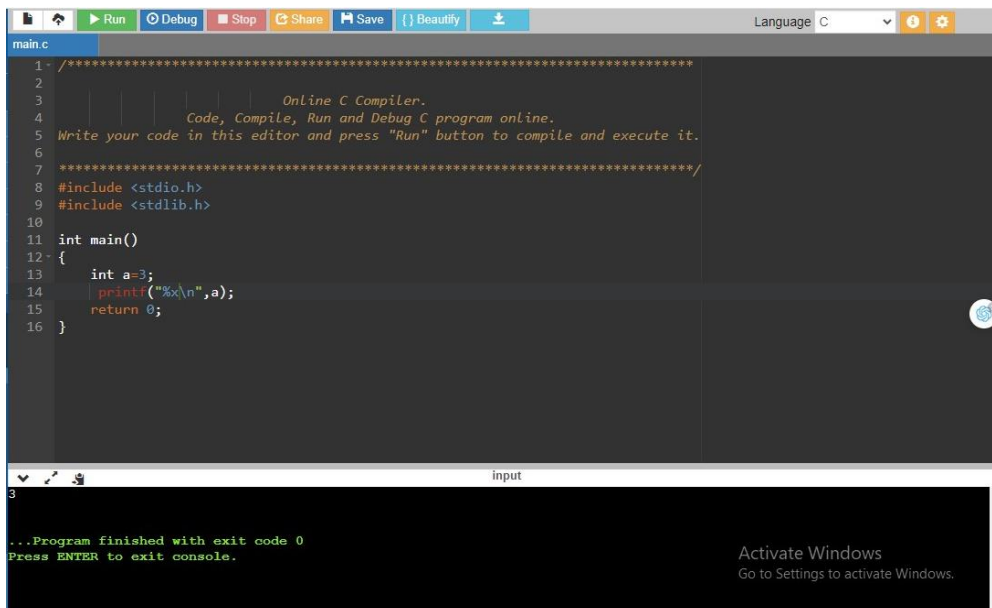
4. write a C Program to print Hexa of a number.



The screenshot shows the Code::Blocks IDE interface. The main editor window displays the following C code:

```
1 #include <stdio.h>
2 #include <stdlib.h>
3
4 int main()
5 {
6     int a=10;
7     printf("%x\n",a);
8     return 0;
9 }
```

The left sidebar shows the project structure with 'lab-1' and 'main.c'.



The screenshot shows an online C compiler interface. The code editor contains the following C code:

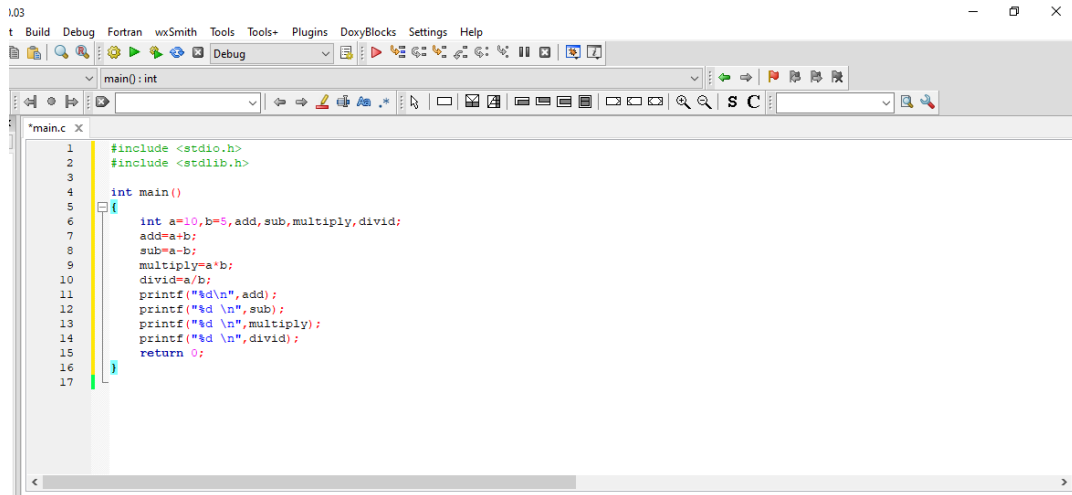
```
1- /*****
2
3      Online C Compiler.
4      Code, Compile, Run and Debug C program online.
5      Write your code in this editor and press "Run" button to compile and execute it.
6
7      *****/
8 #include <stdio.h>
9 #include <stdlib.h>
10
11 int main()
12 {
13     int a=3;
14     printf("%x\n",a);
15     return 0;
16 }
```

The output window at the bottom shows the result of the program execution:

```
...Program finished with exit code 0
Press ENTER to exit console.
```

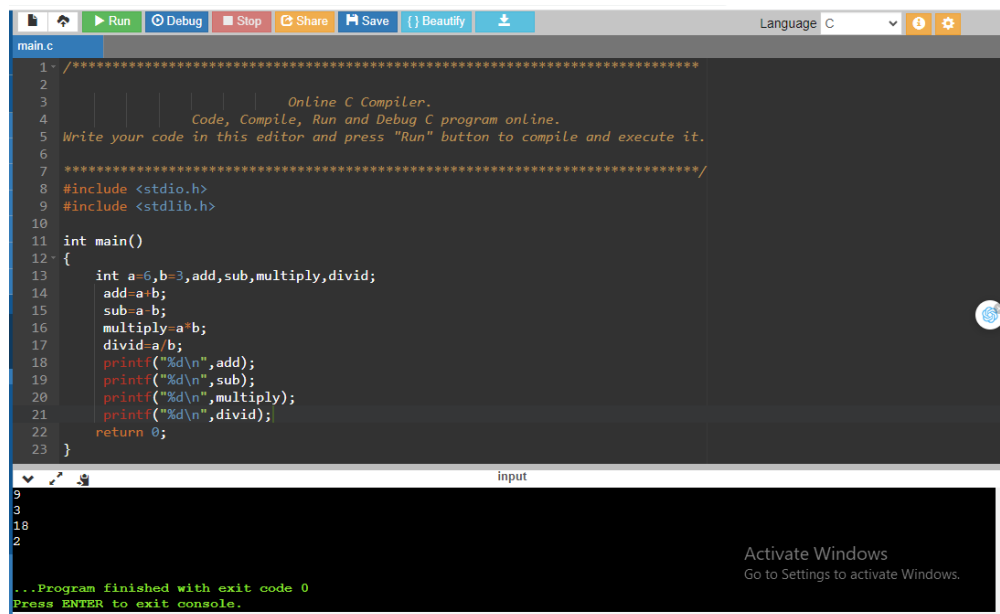
The language is set to C.

5- write a C Program to make simple calculations (add, sub, multiply, divid) on two integers



A screenshot of a code editor window showing a C program. The program includes `<stdio.h>` and `<stdlib.h>`, and defines a `main` function. Inside `main`, it declares `int a=10, b=5;` and performs addition, subtraction, multiplication, and division, printing the results using `printf`. The program returns 0.

```
1 #include <stdio.h>
2 #include <stdlib.h>
3
4 int main()
5 {
6     int a=10, b=5;
7     add=a+b;
8     sub=a-b;
9     multiply=a*b;
10    divid=a/b;
11    printf("%d\n", add);
12    printf("%d\n", sub);
13    printf("%d\n", multiply);
14    printf("%d\n", divid);
15    return 0;
16 }
17
```



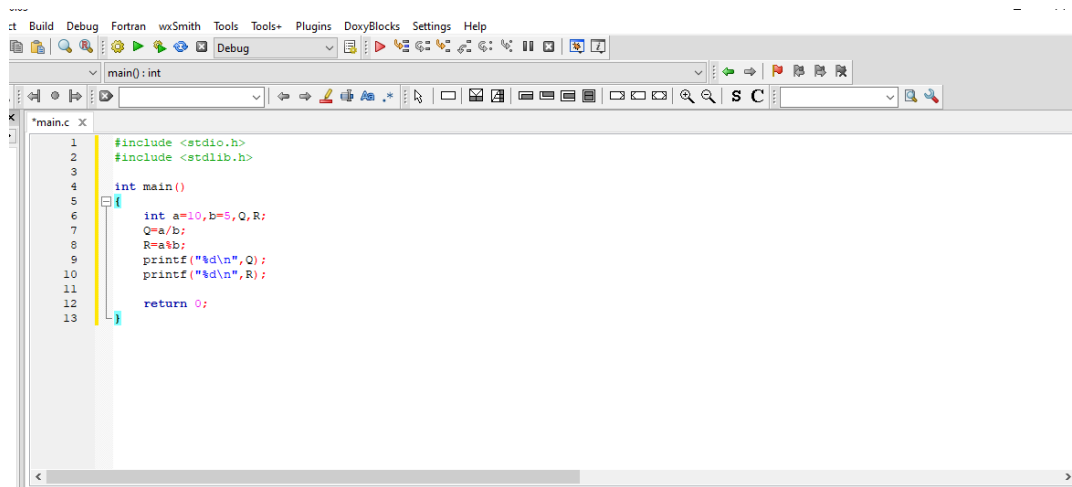
A screenshot of an online C compiler interface. The code editor shows a C program similar to the one in the first image, but with `int a=6, b=3;`. The program performs the same calculations and prints the results. The output window at the bottom shows the program finished with exit code 0.

```
1. /*****
2.
3.      Online C Compiler.
4.      Code, Compile, Run and Debug C program online.
5.      Write your code in this editor and press "Run" button to compile and execute it.
6.
7. *****/
8 #include <stdio.h>
9 #include <stdlib.h>
10
11 int main()
12 {
13     int a=6, b=3;
14     add=a+b;
15     sub=a-b;
16     multiply=a*b;
17     divid=a/b;
18     printf("%d\n", add);
19     printf("%d\n", sub);
20     printf("%d\n", multiply);
21     printf("%d\n", divid);
22     return 0;
23 }
```

input

...Program finished with exit code 0
Press ENTER to exit console.

6. write a C Program to compute Quotient and Remainder.



A screenshot of a code editor window showing a C program. The menu bar includes 'File', 'Edit', 'Build', 'Debug', 'Fortran', 'wxSmith', 'Tools', 'Tools+', 'Plugins', 'DoxBlocks', 'Settings', and 'Help'. The toolbar contains icons for file operations, execution, and search. The editor displays the following code:

```
1  #include <stdio.h>
2  #include <stdlib.h>
3
4  int main()
5  {
6      int a=10,b=5,Q,R;
7      Q=a/b;
8      R=a%b;
9      printf("%d\n",Q);
10     printf("%d\n",R);
11
12     return 0;
13 }
```

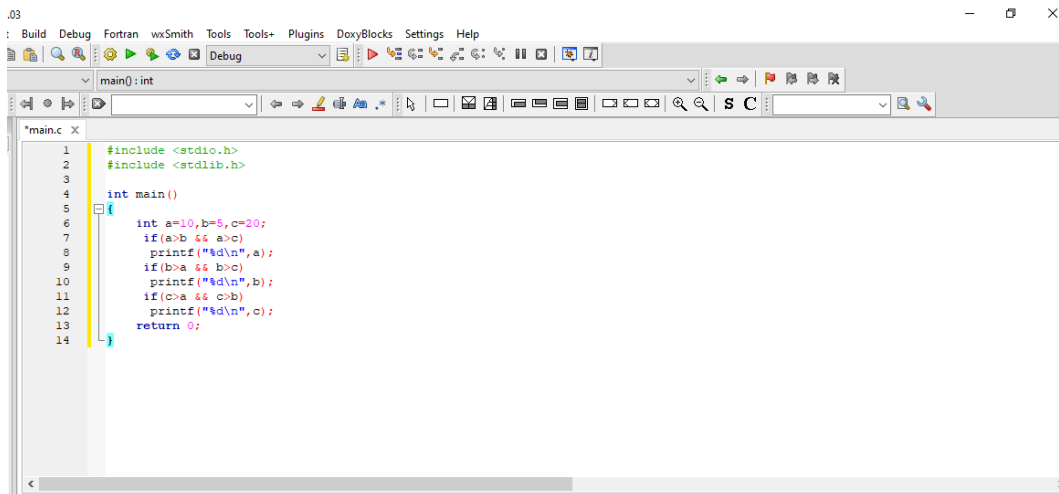


A screenshot of an online C compiler interface. The top bar includes buttons for 'Run', 'Debug', 'Stop', 'Share', 'Save', and 'Beautify', along with a 'Language' dropdown set to 'C'. The code editor contains the following code:

```
1  /*****
2
3      Online C Compiler.
4      Code, Compile, Run and Debug C program online.
5      Write your code in this editor and press "Run" button to compile and execute it.
6
7  *****/
8  #include <stdio.h>
9  #include <stdlib.h>
10
11  int main()
12  {
13      int a=6,b=3,Q,R;
14      Q=a/b;
15      R=a%b;
16      printf("%d\n",Q);
17      printf("%d",R);
18      return 0;
19  }
```

Below the code editor is an 'input' field and a console output area. The console shows the message: '...Program finished with exit code 0' and 'Press ENTER to exit console.' An 'Activate Windows' watermark is visible in the bottom right corner.

7.write a C Program to Find the Largest Number Among Three Numbers.

A screenshot of a code editor window showing a C program. The window has a menu bar with options: Build, Debug, Fortran, wxSmith, Tools, Tools+, Plugins, DoxyBlocks, Settings, and Help. Below the menu bar is a toolbar with various icons for file operations, execution, and search. The editor displays a file named 'main.c' with the following code:

```
1 #include <stdio.h>
2 #include <stdlib.h>
3
4 int main()
5 {
6     int a=10,b=5,c=20;
7     if(a>b && a>c)
8         printf("%d\n",a);
9     if(b>a && b>c)
10        printf("%d\n",b);
11     if(c>a && c>b)
12        printf("%d\n",c);
13     return 0;
14 }
```

The code is color-coded: preprocessor directives are green, keywords are blue, and literals and identifiers are black. The program defines three integers a, b, and c, and uses if statements to print the largest one.

RunDebugStopShareSaveBeautify

Language C

```
main.c
1 1.
2 2.
3 3. Online C Compiler.
4 4. Code, Compile, Run and Debug C program online.
5 5. Write your code in this editor and press "Run" button to compile and execute it.
6 6.
7 7.
8 #include <stdio.h>
9 #include <stdlib.h>
10
11 int main()
12 {
13     int a=6,b=3,c=9;
14     if(a>b && a>c)
15         printf("%d\n",a);
16     if(b>a && b>c)
17         printf("%d\n",b);
18     if(c>a && c>b)
19         printf("%d\n",c);
20
21     return 0;
22 }
```

input

```
9
...Program finished with exit code 0
Press ENTER to exit console.
```

Activate Windows
Go to Settings to activate Windows.