

**STUDENT NAME : U.T. Udawaththa**

**STUDENT NO : 30136**

**BATCH NO : 23.1**

**DEGREE PROGRAMME : Management & information system**



**Q 01)**

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

```
#include <stdlib.h>
```

```
int main()
```

```
{
```

```
    printf("Uresha Thirandi Udawaththa \n");
```

```
    printf("Telijjawila central college\n");
```

```
    return 0;
```

```
}
```

A screenshot of a C++ IDE (Code::Blocks) showing the execution of a program. The main window displays the source code for 'practical1.1.c', which includes headers for stdio.h and stdlib.h, and a main function that prints the student's name and college. The output window on the right shows the program's execution, displaying the printed text and the return status. The bottom status bar indicates the current file, line, and column. The taskbar at the bottom shows the system clock and other active applications.

```
main.c [practical1.1] - Code::Blocks 20.03
Edit View Search Project Build Debug Fortran wxSmith Tools Tools+ Plugins DoxyBlocks Settings Help
practical1.1
main.c
1  #include <stdio.h>
2  #include <stdlib.h>
3
4  int main()
5  {
6      printf("Uresha Thirandi Udawaththa \n");
7      printf("Telijjawila central college\n");
8
9      return 0;
10 }
11

"C:\Users\3PCT\Desktop\C codes\practical1.1\bin\Debug\practical1.1.exe"
Uresha Thirandi Udawaththa
Telijjawila central college
Process returned 0 (0x0)   execution time : 0.094 s
Press any key to continue.

Run: Debug in practical1.1 (compiler: GNU GCC Compiler)
Checking for existence: C:\Users\3PCT\Desktop\C codes\practical1.1\bin\Debug\practical1.1.exe
Set variable: PATH=.;C:\Program Files\CodeBlocks\MinGW\bin;C:\Program Files\CodeBlocks\MinGW\bin;C:\Windows\System32;C:\Windows;C:\Windows\System32\wbem;C:\Windows\System32\WindowsPowerShell\v1.0;C:\Windows\System32\OpenSSH;C:\Program Files (x86)\NVIDIA Corporation\PhysX\Common;C:\Users\3PCT\AppData\Local\Microsoft\WindowsApps
Executing: "C:\Program Files\CodeBlocks\cb_console_runner.exe" "C:\Users\3PCT\Desktop\C codes\practical1.1\bin\Debug\practical1.1.exe" (in C:\Users\3PCT\Desktop\C codes\practical1.1\.)
```

## Q 02)

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

```
int main()
{
    printf("*\n");
    printf("**\n");
    printf("***\n");
    printf("****\n");
    printf("*****\n");
}
```

The screenshot displays the Code::Blocks IDE interface. The main editor window shows a C program named `main.c` with the following code:

```
1  #include <stdio.h>
2  #include <stdlib.h>
3
4  int main()
5  {
6      printf("*\n");
7      printf("**\n");
8      printf("***\n");
9      printf("****\n");
10     printf("*****\n");
11 }
12
13
```

The output window, titled `"C:\Users\3PCT\Desktop\C codes\practical1.2\bin\Debug\practical1.2.exe"`, shows the execution results:

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

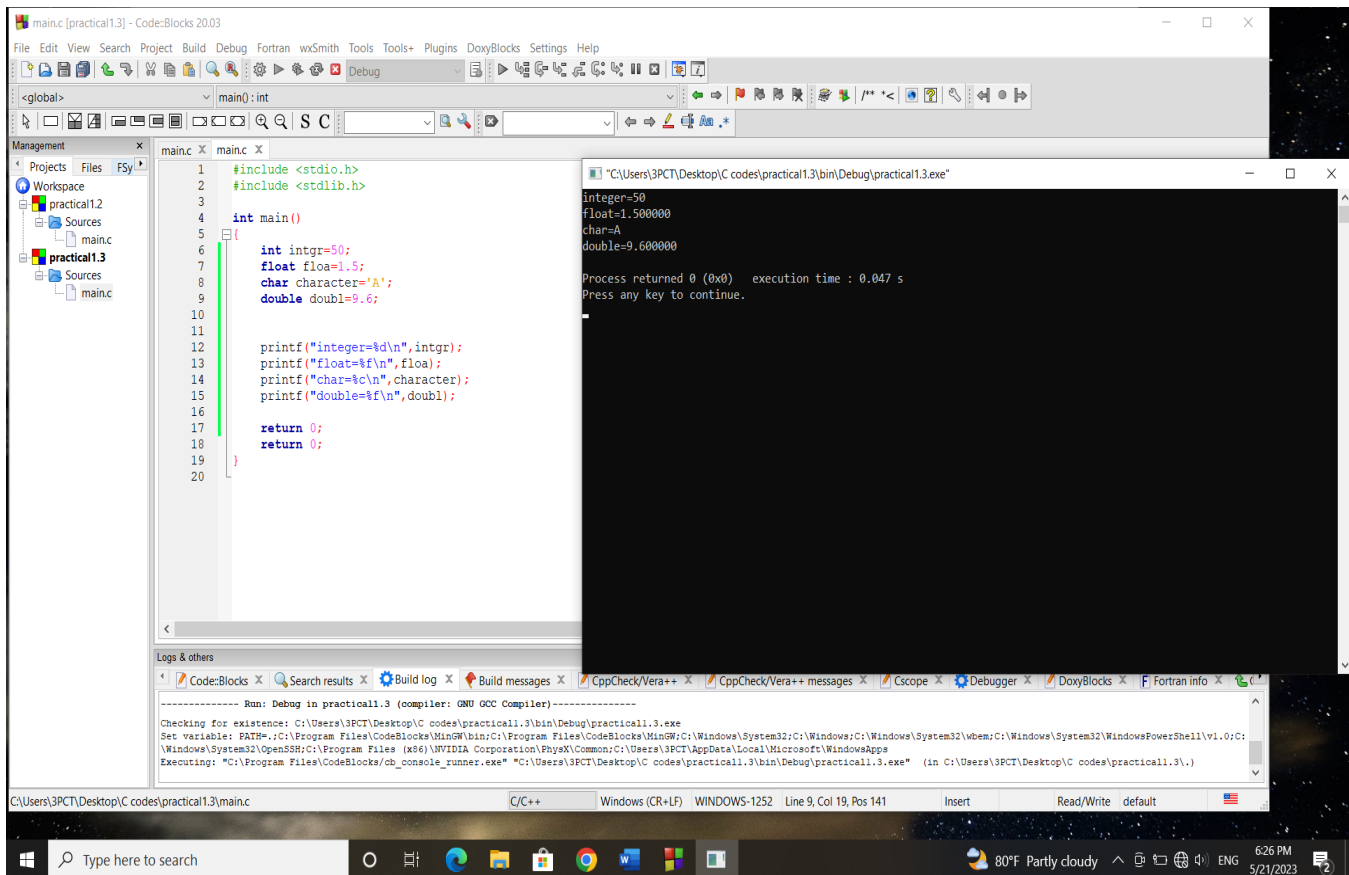
The status bar at the bottom indicates the file path `C:\Users\3PCT\Desktop\C codes\practical1.2\main.c`, the language `C/C++`, and the window state `Windows (CR+LF)`. The system tray at the bottom right shows the date and time as `5/21/2023 6:17 PM`.

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

```
int main()
{
    int intgr=50;
    float floa=1.5;
    char character='A';
    double doubl=9.6;

    printf("integer=%d\n",intgr);
    printf("float=%f\n",floa);
    printf("char=%c\n",character);
    printf("double=%f\n",doubl);

    return 0;
    return 0;
}
```



#### Q 04)

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

int main()
{
    int no1,no2,total;
    printf("enter number1:");
    scanf("%d",&no1);
    printf("enter number2:");
    scanf("%d",&no2);

    total=no1+no2;

    printf("%d+%d \n",no1,no2);
    printf("total=%d\n",total);

    return 0;
}
```

The screenshot displays the Code::Blocks IDE interface. The main editor window shows a C program that prompts the user for two numbers, calculates their sum, and prints the result. The program is named 'practical1.4.c' and is located in the 'C:\Users\3PCT\Desktop\C codes\practical1.4\bin\Debug' directory. The output window shows the program's execution, where the user enters '25' and '12', resulting in a sum of '37'. The status bar at the bottom indicates the current line is 9, column 27, position 162.

```
main.c [practical1.4] - Code::Blocks 20.03
File Edit View Search Project Build Debug Fortran wxSmith Tools Tools+ Plugins DoxyBlocks Settings Help
Debug
Management
Workspace
practical1.2
Sources
practical1.3
Sources
practical1.4
Sources
main.c
1 #include <stdio.h>
2 #include <stdlib.h>
3
4 int main()
5 {
6     int no1,no2,total;
7     printf("enter number1:");
8     scanf("%d",&no1);
9     printf("enter number2:");
10    scanf("%d",&no2);
11
12    total=no1+no2;
13
14    printf("%d+%d \n",no1,no2);
15    printf("total=%d\n",total);
16
17    return 0;
18 }
19
"C:\Users\3PCT\Desktop\C codes\practical1.4\bin\Debug\practical1.4.exe"
enter number1:25
enter number2:12
25+12
total=37
Process returned 0 (0x0) execution time : 3.656 s
Press any key to continue.
Logs & others
Code::Blocks Search results Build log Build messages CppCheck/Ver++ CppCheck/Ver++ messages Cscope Debugger DoxyBlocks Fortran info
Run: Debug in practical1.4 (compiler: GNU GCC Compiler)
Checking for existence: C:\Users\3PCT\Desktop\C codes\practical1.4\bin\Debug\practical1.4.exe
Set variable: PATH=.;C:\Program Files\CodeBlocks\MinGW\bin;C:\Program Files\CodeBlocks\MinGW\bin;C:\Windows\System32\cmd;C:\Windows\System32\WindowsPowerShell\v1.0;C:\Windows\System32\OpenSSH\cmd;C:\Program Files (x86)\NVIDIA Corporation\PhysX\Common;C:\Users\3PCT\AppData\Local\Microsoft\WindowsApps
Executing: "C:\Program Files\CodeBlocks\cb_console_runner.exe" "C:\Users\3PCT\Desktop\C codes\practical1.4\bin\Debug\practical1.4.exe" (in C:\Users\3PCT\Desktop\C codes\practical1.4\.)
C:\Users\3PCT\Desktop\C codes\practical1.4\main.c C/C++ Windows (CR+LF) WINDOWS-1252 Line 9, Col 27, Pos 162 Insert Read/Write default
```

### Q 05)

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

int main()
{
    int no1,no2,total;
    float avg;

    printf("enter frist no:");
    scanf("%d",&no1);
    printf("enter second no:");
    scanf("%d",&no2);
    total=(no1+no2);
    printf("%d=%d\n",no1,no2);
    printf("total=%d\n",total);
    avg=(total/2);
    printf("average is%f",avg);

    return 0;
}
```

The screenshot shows the Code::Blocks IDE with the following components:

- Project Explorer:** Shows a workspace with projects 'practical1.2', 'practical1.3', 'practical1.4', and 'practical1.5'. The 'practical1.5' project is selected, showing its source files.
- Editor:** Displays the source code of 'main.c' for 'practical1.5'. The code is as follows:

```
1 #include <stdio.h>
2 #include <stdlib.h>
3
4 int main()
5 {
6     int no1,no2,total;
7     float avg;
8
9     printf("enter frist no:");
10    scanf("%d",&no1);
11    printf("enter second no:");
12    scanf("%d",&no2);
13    total=(no1+no2);
14    printf("%d=%d\n",no1,no2);
15    printf("total=%d\n",total);
16    avg=(total/2);
17    printf("average is%f",avg);
18
19    return 0;
20 }
21
```
- Output Window:** Shows the execution output:

```
enter frist no:25
enter second no:9
25+9
total=34
average is17.000000
Process returned 0 (0x0)   execution time : 3.415 s
Press any key to continue.
```
- Log & others:** Shows the build process details, including the compiler (GNU GCC Compiler) and the execution command.

## Q 06]

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

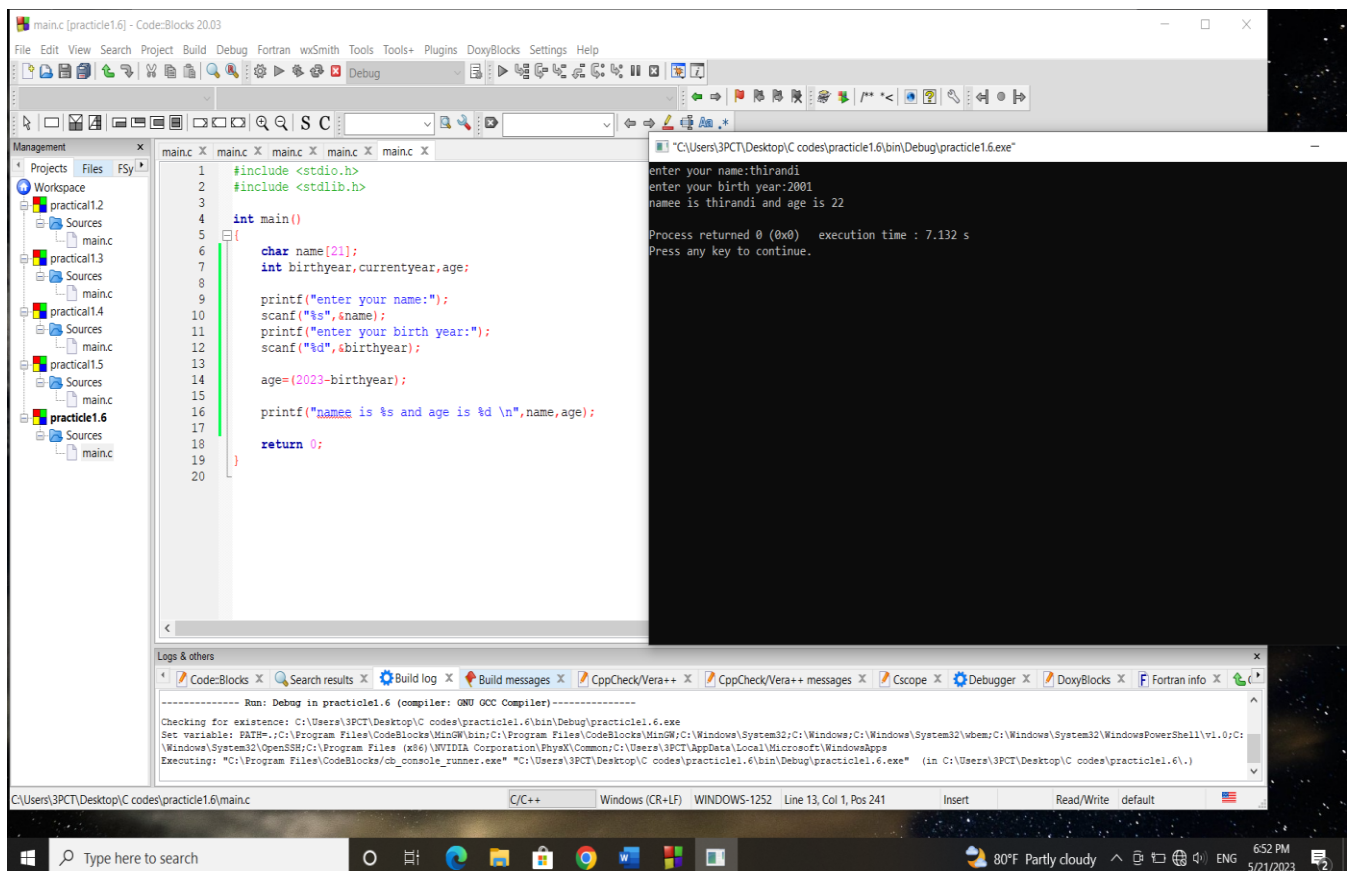
```
int main()
{
    char name[21];
    int birthyear,currentyear,age;

    printf("enter your name:");
    scanf("%s",&name);
    printf("enter your birth year:");
    scanf("%d",&birthyear);

    age=(2023-birthyear);

    printf("name is %s and age is %d \n",name,age);

    return 0;
}
```



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

The screenshot displays a Windows desktop with a Code::Blocks IDE window titled "main.c [practical1.7] - Code::Blocks 20.03". The IDE interface includes a menu bar (File, Edit, View, Search, Project, Build, Debug, Fortran, wxSmith, Tools, Tools+, Plugins, DoxyBlocks, Settings, Help), a toolbar, and a project manager on the left showing a tree view of files and folders. The main editor window displays a C program named "practical1.7.c" with the following code:

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

int main()
{
    int no1, no2, no3;

    printf("enter frist number:");
    scanf("%d", &no1);
    printf("enter seecond number:");
    scanf("%d", &no2);

    no3=no1;
    no1=no2;
    no2=no3;

    printf("after swapping f_no: %d\n", no1);
    printf("after swapping s_no: %d\n", no2);
    return 0;
}
```

The program is compiled and debugged. The output window shows the execution results:

```
enter frist number:25
enter seecond number:5
after swapping f_no: 5
after swapping s_no:25

Process returned 0 (0x0)   execution time : 3.533 s
Press any key to continue.
```

The status bar at the bottom of the IDE window indicates the current file is "C:\Users\3PCT\Desktop\C codes\practical1.7\main.c", the compiler is "C/C++", and the window title is "Windows (CR+LF) WINDOWS-1252 Line 6, Col 19, Pos 76".

## Q 08]

The screenshot displays the Code::Blocks IDE interface. The main editor window shows a C program named `main.c` with the following code:

```
1 #include <stdio.h>
2 #include <stdlib.h>
3
4 int main()
5 {
6     printf("The color: %s\n", "blue");
7     printf("First number: %d\n", 12345);
8     printf("Second number: %04d\n", 25);
9     printf("Third number: %i\n", 1234);
10    printf("Float number: %3.2f\n", 3.14159);
11    printf("Hexadecimal: %x\n", 255);
12    printf("Octal: %o\n", 255);
13    printf("Unsigned value: %u\n", 150);
14    printf("Just print the percentage sign %%\n", 10);
15
16    return 0;
17 }
18
```

The output window shows the execution results:

```
The color: blue
First number: 12345
Second number: 0025
Third number: 1234
Float number: 3.14
Hexadecimal: ff
Octal: 377
Unsigned value: 150
Just print the percentage sign %

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

The status bar at the bottom indicates the file path `C:\Users\3PCT\Desktop\practical1.8\main.c`, the language `C/C++`, and the window title `Windows (CR+LF) WINDOWS-1252`. The system tray shows the date and time as `7:01 PM 5/21/2023`.