Lab Report 06 by 0432410005101088

1. Write a C program to find cube of any number using function
2. Write a C program to find diameter, circumference and area of circle using functions
3. Write a C program to find maximum and minimum between two numbers using functions
4. Write a C program to check whether a number is even or odd using functions
5. Write a C program to print all perfect numbers between given interval using functions
6. Write a C program to find power of any number using function
7. Write a C program to print numbers between 1 to n using function
8. Write a C program to print all even or odd numbers in given range using function
9. Write a C program to find sum of all even or odd numbers in given range using function
10. Write a C program to find factorial of a given number using function

01.c - Code::Blocks 20.03

File Edit View Search Project Build Debug Fortran wxSmith Tools Tools+ Plugins DoxyBlocks Settings Help

Start here | 01.c

```c
#include<stdio.h>

int cube(int a)
{
    return a*a*a;
}

int main()
{
    int a,result;
    printf("Input number: ");
    scanf("%d", &a);
    result = cube(a);
    printf("cube is %d", result);

    return 0;
}
```

Logs & others

Code::Blocks | Search results | Cccc | Build log | Build messages | CppCheck/Vera++ | CppCheck/Vera++ messages | Cs

File	Line	Message
		=== Build file: "no target" in "no project" (compiler: unknown) ===
		=== Build finished: 0 error(s), 0 warning(s) (0 minute(s), 0 second(s)) ===

G:\My D... | C/C++ | Windows (CR+LF) | WINDOWS-1252 | Line 12, Col 21, Pos 150 | Insert | Read/Write | default

"G:\My Drive\Varsity 2023\CS

```
Input number: 3
cube is 27
Process returned 0 (0x0)   execution time : 8.291 s
Press any key to continue.
```

02.c - Code::Blocks 20.03

File Edit View Search Project Build Debug Fortran wxSmith Tools Tools+ Plugins DoxyBlocks Settings Help

Start here | 02.c

```c
#include<stdio.h>

float dia(float r)
{
    return r*2;
}
float circum(float r)
{
    float pi = 3.1416;
    return 2*pi*r;
}
float A(float r)
{
    float pi = 3.1416;
    return pi*r*r;
}

int main()
{
    float r,diameter,circumference,area;
    printf("Input radius of circle: ");
    scanf("%f", &r);
    diameter = dia(r);
    circumference = circum(r);
    area = A(r);
    printf("diameter is %.1f\ncircumference is %.1f\narea is
%.1f\n", diameter,circumference,area);

    return 0;
}
```

Logs & others

Code::Blocks | Search results | Cccc | Build log | Build messages | CppCheck/Vera++ | CppCheck/Vera++ messages | Cs

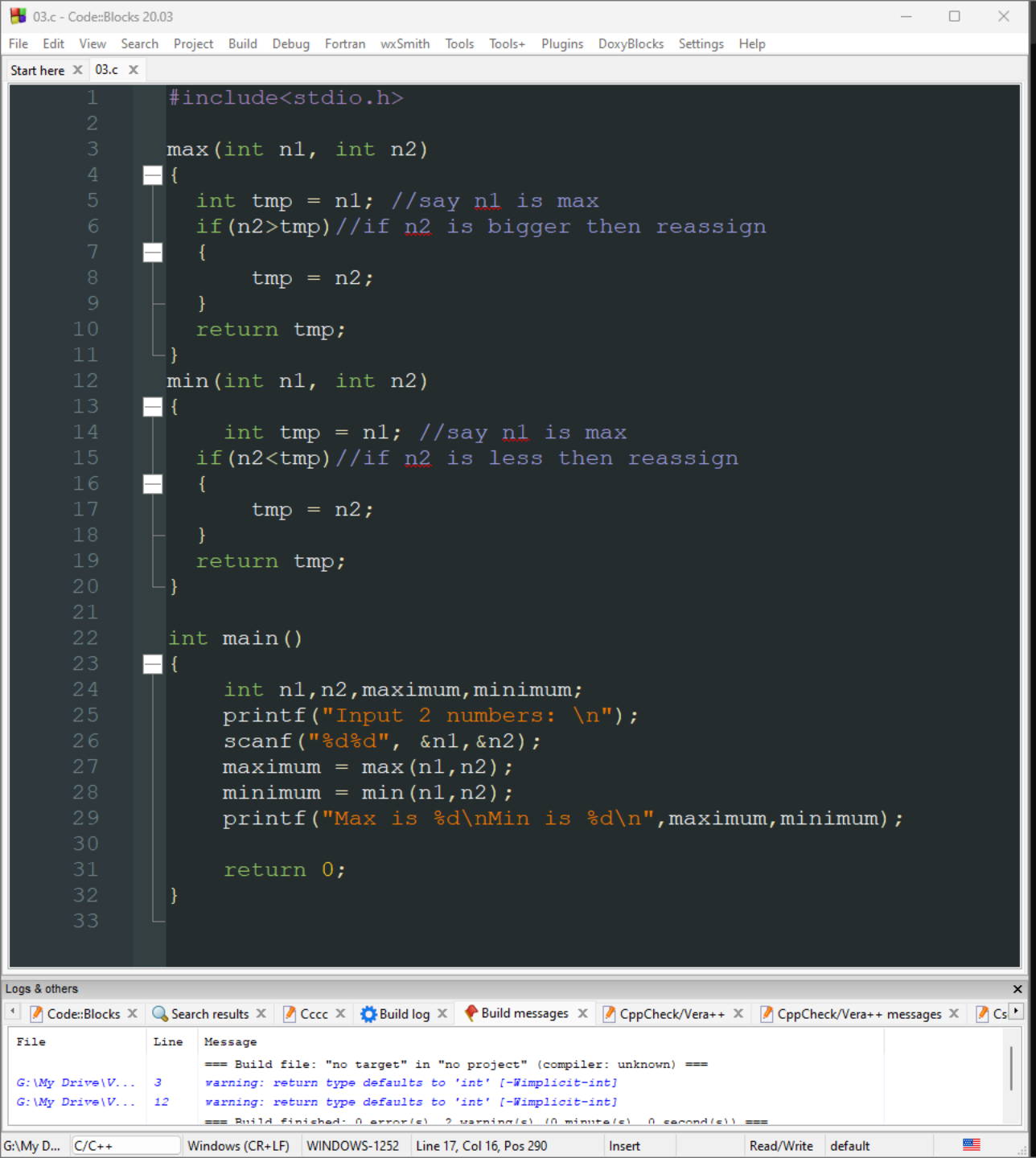
File	Line	Message
		=== Build file: "no target" in "no project" (compiler: unknown) ===
		=== Build finished: 0 error(s), 0 warning(s) (0 minute(s), 0 second(s)) ===

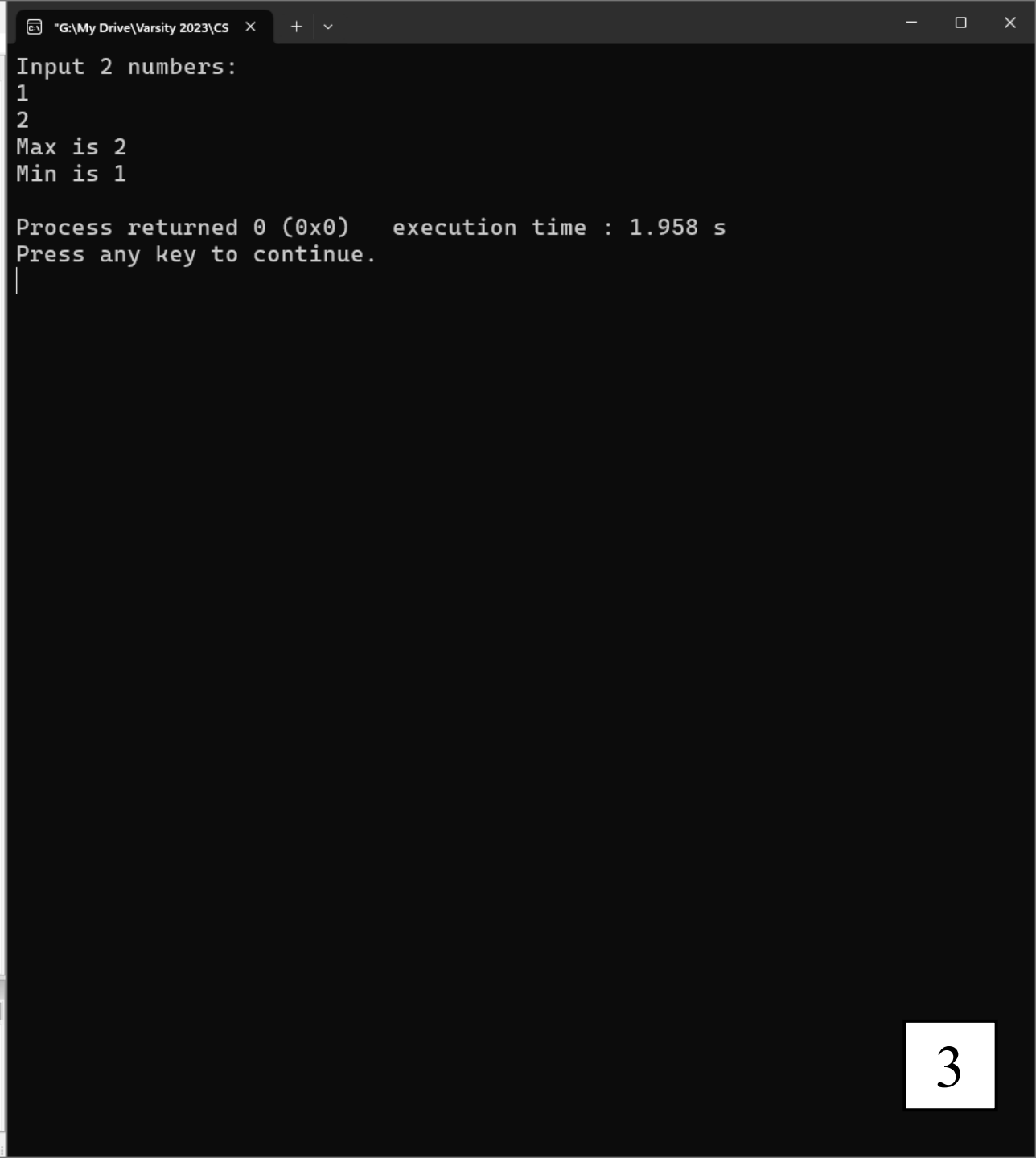
G:\My D... | C/C++ | Windows (CR+LF) | WINDOWS-1252 | Line 7, Col 22, Pos 85 | Insert | Read/Write | default

"G:\My Drive\Varsity 2023\CS

```
Input radius of circle: 3
diameter is 6.0
circumference is 18.8
area is 28.3

Process returned 0 (0x0)   execution time : 7.338 s
Press any key to continue.
```


03.c - Code::Blocks 20.03
File Edit View Search Project Build Debug Fortran wxSmith Tools Tools+ Plugins DoxyBlocks Settings Help
Start here
03.c
#include<stdio.h>
max(int n1, int n2)
{
int tmp = n1; //say n1 is max
if(n2>tmp)//if n2 is bigger then reassign
{
tmp = n2;
}
return tmp;
}
min(int n1, int n2)
{
int tmp = n1; //say n1 is max
if(n2<tmp)//if n2 is less then reassign
{
tmp = n2;
}
return tmp;
}
int main()
{
int n1,n2,maximum,minimum;
printf("Input 2 numbers: \n");
scanf("%d%d", &n1,&n2);
maximum = max(n1,n2);
minimum = min(n1,n2);
printf("Max is %d\nMin is %d\n",maximum,minimum);
return 0;
}
Logs & others
Code::Blocks
Search results
Cccc
Build log
Build messages
CppCheck/Vera++
CppCheck/Vera++ messages
File
Line
Message
=== Build file: "no target" in "no project" (compiler: unknown) ===
G:\My Drive\V...
3
warning: return type defaults to 'int' [-Wimplicit-int]
G:\My Drive\V...
12
warning: return type defaults to 'int' [-Wimplicit-int]
G:\My D...
C/C++
Windows (CR+LF)
WINDOWS-1252
Line 17, Col 16, Pos 290
Insert
Read/Write
default


"G:\My Drive\Varsity 2023\CS
Input 2 numbers:
1
2
Max is 2
Min is 1
Process returned 0 (0x0) execution time : 1.958 s
Press any key to continue.

04.c - Code::Blocks 20.03

File Edit View Search Project Build Debug Fortran wxSmith Tools Tools+ Plugins DoxyBlocks Settings Help

Start here | 04.c

```c
#include<stdio.h>

even_or_odd(int n, int result)
{
  if(n%2==0)
  {
      result = 1;
  }

  return result;
}

int main()
{
    int n,result = 0;
    printf("Input a number: \n");
    scanf("%d", &n);
   result = even_or_odd(n,result);
   if(result)
   {
       printf("\nnumber is Even\n");
   }
   else
   {
       printf("\nnumber is Odd\n");
   }

    return 0;
}
```

Logs & others

Code::Blocks | Search results | Cccc | Build log | Build messages | CppCheck/Vera++ | CppCheck/Vera++ messages | Cs

File	Line	Message
		=== Build file: "no target" in "no project" (compiler: unknown) ===
G:\My Drive\V...	3	warning: return type defaults to 'int' [-Wimplicit-int]
		=== Build finished: 0 error(s), 1 warning(s) (0 minute(s), 0 second(s)) ===

G:\My D... | C/C++ | Windows (CR+LF) | WINDOWS-1252 | Line 10, Col 17, Pos 117 | Insert | Read/Write | default

"G:\My Drive\Varsity 2023\CS

```
Input a number:
5

number is Odd

Process returned 0 (0x0)   execution time : 3.473 s
Press any key to continue.
```

05.c - Code::Blocks 20.03

File Edit View Search Project Build Debug Fortran wxSmith Tools Tools+ Plugins DoxyBlocks Settings Help

Start here | 05.c

```c
#include<stdio.h>

void perfect(int n1, int n2)
{
    printf("\nPerfect numbers within the given interval:\n");
    for(n1; n1<n2; n1++)
    {
        int sum = 0;
        for(int i=1; i<n1; i++)
        {
            if(n1%i==0)
            {
                sum = sum+i;
            }
        }
        if(sum==n1)
        {
            printf("%d ",n1);
        }
    }

}

int main()
{

    int n1,n2;
    printf("Input start of interval: \n");
    scanf("%d", &n1);
    printf("Input end of interval: \n");
    scanf("%d", &n2);

    perfect(n1,n2);

    printf("\n");
    return 0;
}
```

G:\My D... | C/C++ | Windows (CR+LF) | WINDOWS-1252 | Line 34, Col 1, Pos 588 | Insert | Read/Write | default

"G:\My Drive\Varsity 2023\CS

```
Input start of interval:
1
Input end of interval:
10000

Perfect numbers within the given interval:
6 28 496 8128

Process returned 0 (0x0)   execution time : 10.648 s
Press any key to continue.
```

06.c - Code::Blocks 20.03

File Edit View Search Project Build Debug Fortran wxSmith Tools Tools+ Plugins DoxyBlocks Settings Help

Start here | 06.c

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

int Pow(int x, int y)
{
    int mul = 1;
    for(int i = 1; i<=y;i++)
    {
        mul = mul*x;
    }
    return mul;
}

int main()
{
    int x,y,result;
    printf("Input base value: \n");
    scanf("%d", &x);
    printf("Input power value: \n");
    scanf("%d", &y);

    result = Pow(x,y);
    printf("\npower %d of base %d is %d\n",y,x,result);


    return 0;
}
```

Logs & others

Code::Blocks | Search results | Cccc | Build log | Build messages | CppCheck/Vera++ | CppCheck/Vera++ messages | Cs

File	Line	Message
		=== Build file: "no target" in "no project" (compiler: unknown) ===
		=== Build finished: 0 error(s), 0 warning(s) (0 minute(s), 0 second(s)) ===

G:\My D... | C/C++ | Windows (CR+LF) | WINDOWS-1252 | Line 8, Col 6, Pos 118 | Insert | Read/Write | default

"G:\My Drive\Varsity 2023\CS

```
Input base value:
5
Input power value:
2

power 2 of base 5 is 25

Process returned 0 (0x0)   execution time : 5.575 s
Press any key to continue.
```

07.c - Code::Blocks 20.03

File Edit View Search Project Build Debug Fortran wxSmith Tools Tools+ Plugins DoxyBlocks Settings Help

Start here | 07.c

```c
#include<stdio.h>

void print_num(int n)
{
 for(int i = 1; i<=n;i++)
 {
     printf("%d ",i);
 }
}

int main()
{
    int n,result;
    printf("Input end range: \n");
    scanf("%d", &n);
    print_num(n);


    return 0;
}
```

Logs & others

Code::Blocks | Search results | Cccc | Build log | Build messages | CppCheck/Vera++ | CppCheck/Vera++ messages | Cs

File	Line	Message
		=== Build file: "no target" in "no project" (compiler: unknown) ===
		=== Build finished: 0 error(s), 0 warning(s) (0 minute(s), 4 second(s)) ===

G:\My D... | C/C++ | Windows (CR+LF) | WINDOWS-1252 | Line 3, Col 22, Pos 42 | Insert | Read/Write | default

"G:\My Drive\Varsity 2023\CS

```
Input end range:
20
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
Process returned 0 (0x0)   execution time : 5.843 s
Press any key to continue.
```

08.c - Code::Blocks 20.03

File Edit View Search Project Build Debug Fortran wxSmith Tools Tools+ Plugins DoxyBlocks Settings Help

Start here | 08.c

```c
#include<stdio.h>

void even(int n1, int n2)
{
    printf("\nPrint Even Numbers:\n");
    for(n1;n1<=n2;n1++)
    {
        if(n1%2==0)
        {
            printf("%d\n",n1);
        }
    }
}
void odd(int n1, int n2)
{
    printf("\nPrint Odd Numbers:\n");
    for(n1;n1<=n2;n1++)
    {
        if(n1%2!=0)
        {
            printf("%d\n",n1);
        }
    }
}

int main()
{
    int n1,n2,what;
    printf("Input start range: \n");
    scanf("%d", &n1);
    printf("Input end range: \n");
    scanf("%d", &n2);
printf("Print Even (0) / Odd (1)?\n");
scanf("%d",&what);
if(what==0)
{
    even(n1,n2);
}
else if(what==1)
{
    odd(n1,n2);
}
else
{
    printf("INVALID");
}

    return 0;
}
```

G:\My D... | C/C++ | Windows (CR+LF) | WINDOWS-1252 | Line 18, Col 6, Pos 306 | Insert | Read/Write | default

"G:\My Drive\Varsity 2023\CS

```
Input start range:
1
Input end range:
20
Print Even (0) / Odd (1)?
0

Print Even Numbers:
2
4
6
8
10
12
14
16
18
20

Process returned 0 (0x0)   execution time : 25.326 s
Press any key to continue.
```

"G:\My Drive\Varsity 2023\CS

```
Input start range:
1
Input end range:
20
Print Even (0) / Odd (1)?
1

Print Odd Numbers:
1
3
5
7
9
11
13
15
17
19

Process returned 0 (0x0)   execution time : 12.148 s
Press any key to continue.
```

09.c - Code::Blocks 20.03

File Edit View Search Project Build Debug Fortran wxSmith Tools Tools+ Plugins DoxyBlocks Settings Help

Start here | 09.c

```c
#include<stdio.h>

void even(int n1, int n2)
{
    int sum = 0;
    printf("\nResult:\n");
    for(n1;n1<=n2;n1++)
    {
        if(n1%2==0)
        {
            sum = sum +n1;
        }
    }
    printf("Sum of Even Numbers = %d\n", sum);
}
void odd(int n1, int n2)
{
    int sum = 0;
    printf("\nResult:\n");
    for(n1;n1<=n2;n1++)
    {
        if(n1%2!=0)
        {
            sum = sum +n1;
        }
    }
    printf("Sum of Odd Numbers = %d\n", sum);
}

int main()
{
    int n1,n2,what;
    printf("Input start range: \n");
    scanf("%d", &n1);
    printf("Input end range: \n");
    scanf("%d", &n2);
printf("Print sum of Even (0) / Odd (1)?\n");
scanf("%d",&what);
if(what==0)
{
    even(n1,n2);
}
else if(what==1)
{
    odd(n1,n2);
}
else
{
    printf("INVALID");
}

    return 0;
}
```

G:\My D... | C/C++ | Windows (CR+LF) | WINDOWS-1252 | Line 20, Col 24, Pos 356 | Insert | Read/Write | default

"G:\My Drive\Varsity 2023\CS

```
Input start range:
1
Input end range:
10
Print sum of Even (0) / Odd (1)?
0

Result:
Sum of Even Numbers = 30

Process returned 0 (0x0)   execution time : 11.668 s
Press any key to continue.
```

"G:\My Drive\Varsity 2023\CS

```
Input start range:
1
Input end range:
10
Print sum of Even (0) / Odd (1)?
1

Result:
Sum of Odd Numbers = 25

Process returned 0 (0x0)   execution time : 9.195 s
Press any key to continue.
```

10.c - Code::Blocks 20.03

File Edit View Search Project Build Debug Fortran wxSmith Tools Tools+ Plugins DoxyBlocks Settings Help

Start here | 10.c

```c
#include<stdio.h>

void factorial(int n)
{
    int mul = 1;
    for(int i = 1; i<=n;i++)
    {
        mul = mul*i;
    }
    printf("\nFactorial of %d is %d\n",n,mul);
}

int main()
{
    int n,result;
    printf("Find factorial of: \n");
    scanf("%d", &n);
   factorial(n);


    return 0;
}
```

G:\My D... | C/C++ | Windows (CR+LF) | WINDOWS-1252 | Line 21, Col 14, Pos 313 | Insert | Read/Write | default

"G:\My Drive\Varsity 2023\CS

```
Find factorial of:
5

Factorial of 5 is 120

Process returned 0 (0x0)   execution time : 5.012 s
Press any key to continue.
```