



C Programming Lab Report



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Subject: Programming in C



Department: CSE-62



Submission Date: 24-06-2025



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1	Print Name, Date of Birth, and ID
2	Print a Block Letter 'E' and Large 'C' Using Hash (#)
3	Print Characters in Reverse Order
4	Compute Perimeter and Area of a Rectangle
5	Compute Perimeter and Area of a Circle
6	Convert Days into Years, Weeks and Days
7	Calculate Average Value of Two Weighted Items

◆ **Program 1: Write a C program to print your name, date of birth, and ID.**

Code :

```
main.c  [Icons]  Share  Run  Output
1  #include <stdio.h>
2
3  int main() {
4      printf("Name : Mahdi Hasan Shuvo\n");
5      printf("DOB  : Feb 09, 2007\n");
6      printf("ID   : 251-115-030\n");
7      return 0;
8  }
9  |
```

Name : Mahdi Hasan Shuvo
DOB : Feb 09, 2007
ID : 251-115-030

=== Code Execution Successful ===

◆ **Program 2: Write a C program to print a block E using the hash (#), where the E has a**

**height of seven characters and a width of six and five characters.
And also print a**

very large 'C'.

Code :

```
main.c  [Icons]  Share  Run  Output
1  #include <stdio.h>
2
3  int main() {
4      // Letter E
5      printf("#####\n");
6      printf("#\n");
7      printf("#\n");
8      printf("#####\n");
9      printf("#\n");
10     printf("#\n");
11     printf("#####\n");
12
13     printf("\n");
14
15     // Large C
16     printf("#####\n");
17     printf("##  ##\n");
18     printf("#\n");
19     printf("#\n");
20     printf("#\n");
21     printf("#\n");
22     printf("##  ##\n");
23     printf("#####\n");
24
25     return 0;
26 }
27
```


#####

=== Code Execution Successful ===

◆ **Program 3: Write a C program to print the following characters in reverse.**

Test Characters: 'X', 'M', 'L'

Code :

main.c	Output
<pre>1 #include <stdio.h> 2 3 int main() { 4 char a = 'X', b = 'M', c = 'L'; 5 printf("The reverse of %c%c%c is %c%c%c\n", a, b, c, c, b, a); 6 return 0; 7 } 8</pre>	<pre>The reverse of XML is LMX === Code Execution Successful ===</pre>

Output: The reverse of XML is LMX

◆ Program 4 : Write a C program to compute the perimeter and area of a rectangle with a height of 7 inches and a width of 5 inches.

Code :

main.c	Output
<pre>1 #include <stdio.h> 2 3 int main() { 4 int height = 7; 5 int width = 5; 6 int perimeter = 2 * (height + width); 7 int area = height * width; 8 9 printf("Perimeter of the rectangle = %d inches\n", perimeter); 10 printf("Area of the rectangle = %d square inches\n", area); 11 12 return 0; 13 } 14</pre>	<pre>Perimeter of the rectangle = 24 inches Area of the rectangle = 35 square inches === Code Execution Successful ===</pre>

◆ Program 5 : **Write a C program to compute the perimeter and area of a circle with a given**

main.c	Output
<pre>1 #include <stdio.h> 2 3 int main() { 4 float radius; 5 printf("Enter a radius:\n"); 6 scanf("%f", &radius); 7 8 float perimeter = 2 * 3.14 * radius; 9 float area = 3.14 * radius * radius; 10 11 printf("Perimeter of the Circle = %f inches\n", perimeter); 12 printf("Area of the Circle = %f square inches\n", area); 13 14 return 0; 15 } 16</pre>	<pre>Enter a radius: 3 Perimeter of the Circle = 18.840000 inches Area of the Circle = 28.260000 square inches === Code Execution Successful ===</pre>

Input : 3

Output:

Perimeter of the Circle = 18.840000 inches

Area of the Circle = 28.260000 square inches

◆ Program 6 : Write a C program to convert specified days into years, weeks and days. Note: Ignore leap year.

Code :

main.c	Output
<pre>1 #include <stdio.h> 2 3 int main() { 4 int days; 5 printf("Number of days: "); 6 scanf("%d", &days); 7 8 int years = days / 365; 9 int weeks = (days % 365) / 7; 10 int remaining_days = days % 7; 11 12 printf("Years: %d\n", years); 13 printf("Weeks: %d\n", weeks); 14 printf("Days: %d\n", remaining_days); 15 16 return 0; 17 } 18</pre>	<pre>Number of days: 1307 Years: 3 Weeks: 30 Days: 5 === Code Execution Successful ===</pre>

Input : 1307

Output:

Years: 3

Weeks: 30

Days: 5

◆ **Program 7 : Write a C program that accepts two items' weight and number of purchases**

(floating point values) and calculates their average value.

Code :

main.c	Output
<pre>1 #include <stdio.h> 2 3 int main() { 4 float w1, w2; 5 int n1, n2; 6 7 printf("Weight - Item1: "); 8 scanf("%f", &w1); 9 printf("No. of item1: "); 10 scanf("%d", &n1); 11 12 printf("Weight - Item2: "); 13 scanf("%f", &w2); 14 printf("No. of item2: "); 15 scanf("%d", &n2); 16 17 float total = (w1 * n1) + (w2 * n2); 18 float average = total / (n1 + n2); 19 20 printf("Average Value = %f\n", average); 21 22 return 0; 23 } 24</pre>	<pre>Weight - Item1: 15 No. of item1: 5 Weight - Item2: 25 No. of item2: 4 Average Value = 19.444445 === Code Execution Successful ===</pre>

Input :

15 , 5 , 25 ,4

Output:

Average Value = 19.444445

