

UMass Boston CS 240  
Homework 4  
Due on November 15 at 5 PM (EDT)

**Information:**

- Homework files uploaded on: <https://cs.umb.edu/~aaditya/hw/04>
- Use the given homework files and update the existing code.
- After modifying, run the program files with sample input and verify the given output.
- Required comment on top of the program file, please fill the following details:

- Your Name,
- Date when created file,
- How you approached the solution
- Challenges faced

- Following homework files need to be submitted on **Gradescope**:

*The filenames are case sensitive, kindly put all filenames as lowercase.*

- program1.c – 20 points
- program2.c – 15 points
- program3.c – 20 points
- program4.c – 20 points
- program5.c – 20 points
- readme.txt – 5 points
  - a. Students worked with:
  - b. Books/Websites consulted:
  - c. Time spent on homework (hours):

**Homework programs (5):**

*More instructions are given in the homework program files.*

1. program1.c - C Program to print prime numbers in the specified range using **for** loop.

Sample input:

Enter from: 10

Enter to: 20

Output:

11

13

17

19

2. program2.c - C Program to print prime numbers in the specified range using **while** loop.

Sample input:

Enter from: 10

Enter to: 20

Output:

11

13

17

19

3. program3.c - C Program to print the reverse of a string using Recursion.

Sample input:

Input any string: Massachusetts

Output:

sttesuhcassaM

4. program4.c - C Program to convert a number from decimal to binary using Recursion.

Sample input:

Enter a decimal number: 100

Output:

100 in Binary is: 1100100

5. program5.c - C Program to print Pascal's triangle.

Sample input:

Enter the number of rows: 6

Output:

1

1 1

1 2 1

1 3 3 1

1 4 6 4 1

1 5 10 10 5 1