Student: Alice Johnson (ID: W0202001)

PROG2007 - Programming II

Name: Alice Johnson ID: W0202001

Variables, Operations, and Loops

Write a C program that generates multiplication tables using different loop structures.

TASK REQUIREMENTS:

- Generate a printed NxN table for values N=1 to 13 using for loops
- Table should have column headers showing each N value
- Create a reversed version(13 at top/left) using while loops
- Include clear code comments and consistent formatting
- Preserve the included sample text files for testing

SAMPLE OUTPUT

TAR	LE OF	PRODII	CTS (F	'OR I.O	10P)								
IAD. N	1	2	3	4	5	6	7	8	9	10	11	12	13
1	1	2	3	4	5	6	7	8	9	10	11	12	13
2	2	4	6	8	10	12	14	16	18	20	22	24	26
3	3	6	9	12	15	18	21	24	27	30	33	36	39
4	4	8	12	16	20	24	28	32	36	40	44	48	52
5	5	10	15	20	25	30	35	40	45	50	55	60	65
5	6	12	18	24	30	36	42	48	54	60	66	72	78
7	7	14	21	28	35	42	49	56	63	70	77	84	91
3	8	16	24	32	40	48	56	64	72	80	88	96	104
9	9	18	27	36	45	54	63	72	81	90	99	108	117
10	10	20	30	40	50	60	70	80	90	100	110	120	130
11	11	22	33	44	55	66	77	88	99	110	121	132	143
12	12	24	36	48	60	72	84	96	108	120	132	144	156
13	13	26	39	52	65	78	91	104	117	130	143	156	169
	ERSED							6	_	4	2	2	1
N	13	12	11	10	9	8	7	6	5	4	3	2	1
.3	13 169	12 156	11 143	10 130	9 117	8 104	7 91	78	65	52	39	26	13
N L3 L2	13 169 156	12 156 144	11 143 132	10 130 120	9 117 108	8 104 96	7 91 84	78 72	65 60	52 48	39 36	26 24	13 12
1 13 12 11	13 169 156 143	12 156 144 132	11 143 132 121	10 130 120 110	9 117 108 99	8 104 96 88	7 91 84 77	78 72 66	65 60 55	52 48 44	39 36 33	26 24 22	13 12 11
1 .3 .2 .1	13 169 156 143 130	12 156 144 132 120	11 143 132 121 110	10 130 120 110 100	9 117 108 99 90	8 104 96 88 80	7 91 84 77 70	78 72 66 60	65 60 55 50	52 48 44 40	39 36 33 30	26 24 22 20	13 12 11 10
N L3 L2 L1 L0	13 169 156 143 130 117	12 156 144 132 120 108	11 143 132 121 110 99	10 130 120 110 100 90	9 117 108 99 90 81	8 104 96 88 80 72	7 91 84 77 70 63	78 72 66 60 54	65 60 55 50 45	52 48 44 40 36	39 36 33 30 27	26 24 22 20 18	13 12 11 10 9
N 13 12 11 10 9	13 169 156 143 130 117 104	12 156 144 132 120 108 96	11 143 132 121 110 99 88	10 130 120 110 100 90 80	9 117 108 99 90 81 72	8 104 96 88 80 72 64	7 91 84 77 70 63 56	78 72 66 60 54 48	65 60 55 50 45 40	52 48 44 40 36 32	39 36 33 30 27 24	26 24 22 20 18 16	13 12 11 10 9 8
N 13 12 11 10 9 3	13 169 156 143 130 117 104 91	12 156 144 132 120 108 96 84	11 143 132 121 110 99 88 77	10 130 120 110 100 90 80 70	9 117 108 99 90 81 72 63	8 104 96 88 80 72 64 56	7 91 84 77 70 63 56 49	78 72 66 60 54 48 42	65 60 55 50 45 40 35	52 48 44 40 36 32 28	39 36 33 30 27 24 21	26 24 22 20 18 16 14	13 12 11 10 9 8 7
N L3 L2 L1 L0 9 3	13 169 156 143 130 117 104 91	12 156 144 132 120 108 96 84 72	11 143 132 121 110 99 88 77 66	10 130 120 110 100 90 80 70	9 117 108 99 90 81 72 63 54	8 104 96 88 80 72 64 56 48	7 91 84 77 70 63 56 49 42	78 72 66 60 54 48 42 36	65 60 55 50 45 40 35 30	52 48 44 40 36 32 28 24	39 36 33 30 27 24 21	26 24 22 20 18 16 14	13 12 11 10 9 8 7 6
N 13 12 11 10 9 3 7	13 169 156 143 130 117 104 91 78 65	12 156 144 132 120 108 96 84 72 60	11 143 132 121 110 99 88 77	10 130 120 110 100 90 80 70	9 117 108 99 90 81 72 63	8 104 96 88 80 72 64 56 48	7 91 84 77 70 63 56 49 42 35	78 72 66 60 54 48 42	65 60 55 50 45 40 35 30 25	52 48 44 40 36 32 28	39 36 33 30 27 24 21	26 24 22 20 18 16 14 12	13 12 11 10 9 8 7 6 5
N L3 L2 L1 L0 9 3 7 5	13 169 156 143 130 117 104 91 78 65 52	12 156 144 132 120 108 96 84 72	11 143 132 121 110 99 88 77 66 55 44	10 130 120 110 100 90 80 70 60 50	9 117 108 99 90 81 72 63 54 45	8 104 96 88 80 72 64 56 48	7 91 84 77 70 63 56 49 42	78 72 66 60 54 48 42 36 30	65 60 55 50 45 40 35 30	52 48 44 40 36 32 28 24 20	39 36 33 30 27 24 21 18 15	26 24 22 20 18 16 14	13 12 11 10 9 8 7 6 5 4
REVI N 113 112 111 110 9 8 7 6 5 4 4 3 2	13 169 156 143 130 117 104 91 78 65	12 156 144 132 120 108 96 84 72 60 48	11 143 132 121 110 99 88 77 66 55	10 130 120 110 100 90 80 70 60 50 40	9 117 108 99 90 81 72 63 54 45 36	8 104 96 88 80 72 64 56 48 40 32	7 91 84 77 70 63 56 49 42 35 28	78 72 66 60 54 48 42 36 30 24	65 60 55 50 45 40 35 30 25 20	52 48 44 40 36 32 28 24 20 16	39 36 33 30 27 24 21 18 15	26 24 22 20 18 16 14 12 10	13 12 11 10 9 8 7 6 5

Assignment 1

Process finished with exit code 0

Submission Instructions

Video Recording Submission:

You will demonstrate the completion of this project via a **video screen-capture recording** of you using CLion, GitBash, and viewing your code to show completion of the **Video Submission Checklist**, which is posted on Brightspace. You will post **either your video file or a link to it**(e.g. a Microsoft Stream recording, make sure to give the instructor permissions to watch it), to the Brightspace Assignment 1 Dropbox prior to the deadline. If you are not sure of how best to capture such a video, seek advice from the instructor prior to the deadline.

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Name: Bob Smith ID: W0202002

Variables, Operations, and Loops

Write a C program that generates multiplication tables using different loop structures.

TASK REQUIREMENTS:

- Generate a printed NxN table for values N=1 to 10 using for loops
- Table should have column headers showing each N value
- Create a reversed version(10 at top/left) using while loops
- Include clear code comments and consistent formatting
- Preserve the included sample text files for testing

SAMPLE OUTPUT

path	ı\to\y	our\	file\	ASSIGI	N1.exe	e				
TABL	E OF	PROD	UCTS(1	FOR LO	OOP)					
N	1	2	3	4	5	6	7	8	9	10
1	1	2	3	4	5	6	7	8	9	10
2	2	4	6	8	10	12	14	16	18	20
3	3	6	9	12	15	18	21	24	27	30
4	4	8	12	16	20	24	28	32	36	40
5	5	10	15	20	25	30	35	40	45	50
6	6	12	18	24	30	36	42	48	54	60
7	7	14	21	28	35	42	49	56	63	70
8	8	16	24	32	40	48	56	64	72	80
9	9	18	27	36	45	54	63	72	81	90
10	10	20	30	40	50	60	70	80	90	100
REVE	RSED	TABL	E OF 1	PRODU	CTS(W	HILE :	LOOP)			
N	10	9	8	7	6	5	4	3	2	1
10	100	90	80	70	60	50	40	30	20	10
9	90	81	72	63	54	45	36	27	18	9
8	80	72	64	56	48	40	32	24	16	8
7	70	63	56	49	42	35	28	21	14	7
6	60	54	48	42	36	30	24	18	12	6
5	50	45	40	35	30	25	20	15	10	5
4	40	36	32	28	24	20	16	12	8	4
3	30	27	24	21	18	15	12	9	6	3
2	20	18	16	14	12	10	8	6	4	2
1	10	9	8	7	6	5	4	3	2	1
Proc	ess f	inis	hed w	ith e	xit c	ode 0				

Submission Instructions

Assignment 1

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Student: Charlie Brown (ID: W0202003) PROG2007 - Programming II

PROG2007 - Programming II

Name: Charlie Brown

Assignment 1

ID: W0202003

Variables, Operations, and Loops

Write a C program that generates multiplication tables using different loop structures.

TASK REQUIREMENTS:

- Generate a printed NxN table for values N=1 to 11 using for loops
- Table should have column headers showing each N value
- Create a reversed version(11 at top/left) using while loops
- Include clear code comments and consistent formatting
- Preserve the included sample text files for testing

SAMPLE OUTPUT

TABLE OF PRODUCTS(FOR LOOP) N
1 1 2 3 4 5 6 7 8 9 10 11 2 2 4 6 8 10 12 14 16 18 20 22 3 3 6 9 12 15 18 21 24 27 30 33 4 4 8 12 16 20 24 28 32 36 40 44 5 5 10 15 20 25 30 35 40 45 50 55 6 6 12 18 24 30 36 42 48 54 60 66 7 7 14 21 28 35 42 49 56 63 70 77 8 8 16 24 32 40 48 56 64 72 80 88 9 9 18 27 36 45 54 63 72 81 90 99 10 10 20 30 40 50 60 70 80 90 100 110 11 11 22 33 44 55 66 77 88 99 110 121 REVERSED TABLE OF PRODUCTS(WHILE LOOP) N 11 10 99 8 7 6 5 4 3 2 1 11 121 110 99 88 77 66 55 44 33 22 11 10 110 100 90 80 70 60 50 40 30 20 10 9 99 90 81 72 63 54 45 36 27 18 9 8 88 80 72 64 56 48 40 32 24 16 8 7 77 70 63 56 49 42 35 28 21 14 7 6 66 66 60 54 48 42 36 30 24 18 12 6 5 55 50 45 40 35 30 25 20 15 10 5
2
3
4
6 6 12 18 24 30 36 42 48 54 60 66 7 7 14 21 28 35 42 49 56 63 70 77 8 8 16 24 32 40 48 56 64 72 80 88 9 9 18 27 36 45 54 63 72 81 90 99 10 10 20 30 40 50 60 70 80 90 100 110 11 11 22 33 44 55 66 77 88 99 110 121 REVERSED TABLE OF PRODUCTS(WHILE LOOP) N 11 10 9 8 7 6 5 4 3 2 1 11 121 110 99 88 77 66 55 44 33 22 11 10 110 100 90 80 70 60 50 40 30 20 10 9 99 90 81 72 63 54 45 36 27 18 9 8 88 80 72 64 56 48 40 32 24 16 8 7 77 70 63 56 49 42 35 28 21 14 7 6 66 60 54 48 42 36 30 24 18 12 6 5 55 50 45 40 35 30 25 20 15 10 5
6 6 12 18 24 30 36 42 48 54 60 66 7 7 14 21 28 35 42 49 56 63 70 77 8 8 16 24 32 40 48 56 64 72 80 88 9 9 18 27 36 45 54 63 72 81 90 99 10 10 20 30 40 50 60 70 80 90 100 110 11 11 22 33 44 55 66 77 88 99 110 121 REVERSED TABLE OF PRODUCTS(WHILE LOOP) N 11 10 9 8 7 6 5 4 3 2 1 11 121 110 99 88 77 66 55 44 33 22 11 10 110 100 90 80 70 60 50 40 30 20 10 9 99 90 81 72 63 54 45 36 27 18 9 8 88 80 72 64 56 48 40 32 24 16 8 7 77 70 63 56 49 42 35 28 21 14 7 6 66 60 54 48 42 36 30 24 18 12 6 5 55 50 45 40 35 30 25 20 15 10 5
7 7 14 21 28 35 42 49 56 63 70 77 8 8 16 24 32 40 48 56 64 72 80 88 9 9 18 27 36 45 54 63 72 81 90 99 10 10 20 30 40 50 60 70 80 90 100 110 11 11 22 33 44 55 66 77 88 99 110 121 REVERSED TABLE OF PRODUCTS(WHILE LOOP) N 11 10 9 8 7 6 5 4 3 2 1 11 121 110 99 88 77 66 55 44 33 22 11 10 110 100 90 80 70 60 50 40 30 20 10 9 99 90 81 72 63 54 45 36 27 18 9 8 88 80 72 64 56 48 40 32 24 16 8 7 77 70 63 56 49 42 35 28 21 14 7 6 66 60 54 48 42 36 30 24 18 12 6 5 55 50 45 40 35 30 25 20 15 10 5
8 8 16 24 32 40 48 56 64 72 80 88 9 9 18 27 36 45 54 63 72 81 90 99 10 10 20 30 40 50 60 70 80 90 100 110 11 11 22 33 44 55 66 77 88 99 110 121 REVERSED TABLE OF PRODUCTS(WHILE LOOP) N 11 10 9 8 7 6 5 4 3 2 1 11 121 110 99 88 77 66 55 44 33 22 11 10 110 100 90 80 70 60 50 40 30 20 10 9 99 90 81 72 63 54 45 36 27 18 9 8 88 80 72 64 56 48 40 32 24 16 8 7 77 70 63 56 49 42 35 28 21 14 7 6 66 60 54 48 42 36 30 24 18 12 6 5 55 50 45 40 35 30 25 20 15 10 5
9 9 18 27 36 45 54 63 72 81 90 99 10 10 20 30 40 50 60 70 80 90 100 110 11 11 22 33 44 55 66 77 88 99 110 121 REVERSED TABLE OF PRODUCTS(WHILE LOOP) N 11 10 9 8 7 6 5 4 3 2 1 11 121 110 99 88 77 66 55 44 33 22 11 10 110 100 90 80 70 60 55 44 33 22 11 10 110 100 90 80 70 60 50 40 30 20 10 9 99 90 81 72 63 54 45 36 27 18 9 8 88 80 72 64 56 48 40 32 24 16 8 7 77 70 63 56 49 42 35 28 21 14 7 6 66 66 60 54 48 42 36 30 24 18 12 6 5 55 50 45 40 35 30 25 20 15 10 5
10
11 11 22 33 44 55 66 77 88 99 110 121 REVERSED TABLE OF PRODUCTS(WHILE LOOP) N 11 10 9 8 7 6 5 4 3 2 1 11 121 110 99 88 77 66 55 44 33 22 11 10 110 100 90 80 70 60 50 40 30 20 10 9 99 90 81 72 63 54 45 36 27 18 9 8 88 80 72 64 56 48 40 32 24 16 8 7 77 70 63 56 49 42 35 28 21 14 7 6 66 60 54 48 42 36 30 24 18 12 6 5 55 50 45 40 35 30 25 20 15 10 5
REVERSED TABLE OF PRODUCTS(WHILE LOOP) N 11 10 9 8 7 6 5 4 3 2 1 11 121 110 99 88 77 66 55 44 33 22 11 10 110 100 90 80 70 60 50 40 30 20 10 9 99 90 81 72 63 54 45 36 27 18 9 8 88 80 72 64 56 48 40 32 24 16 8 7 77 70 63 56 49 42 35 28 21 14 7 6 66 60 54 48 42 36 30 24 18 12 6 5 55 50 45 40 35 30 25 20 15 10 5
11 121 110 99 88 77 66 55 44 33 22 11 10 110 100 90 80 70 60 50 40 30 20 10 9 99 90 81 72 63 54 45 36 27 18 9 8 88 80 72 64 56 48 40 32 24 16 8 7 77 70 63 56 49 42 35 28 21 14 7 6 66 60 54 48 42 36 30 24 18 12 6 5 55 50 45 40 35 30 25 20 15 10 5
10 110 100 90 80 70 60 50 40 30 20 10 9 99 90 81 72 63 54 45 36 27 18 9 8 88 80 72 64 56 48 40 32 24 16 8 7 70 63 56 49 42 35 28 21 14 7 6 66 60 54 48 42 36 30 24 18 12 6 5 55 50 45 40 35 30 25 20 15 10 5
9 99 90 81 72 63 54 45 36 27 18 9 8 88 80 72 64 56 48 40 32 24 16 8 7 70 63 56 49 42 35 28 21 14 7 6 66 60 54 48 42 36 30 24 18 12 6 5 55 50 45 40 35 30 25 20 15 10 5
8 88 80 72 64 56 48 40 32 24 16 8 7 77 70 63 56 49 42 35 28 21 14 7 6 66 60 54 48 42 36 30 24 18 12 6 5 55 50 45 40 35 30 25 20 15 10 5
7 77 70 63 56 49 42 35 28 21 14 7 6 66 60 54 48 42 36 30 24 18 12 6 5 55 50 45 40 35 30 25 20 15 10 5
6 66 60 54 48 42 36 30 24 18 12 6 5 55 50 45 40 35 30 25 20 15 10 5
5 55 50 45 40 35 30 25 20 15 10 5
3 33 30 27 24 21 18 15 12 9 6 3
2 22 20 18 16 14 12 10 8 6 4 2
1 11 10 9 8 7 6 5 4 3 2 1

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PROG2007 - Programming II

Name: Dana White ID: W0202004

Variables, Operations, and Loops

Write a C program that generates multiplication tables using different loop structures.

TASK REQUIREMENTS:

- Generate a printed NxN table for values N=1 to 9 using for loops
- Table should have column headers showing each N value
- Create a reversed version(9 at top/left) using while loops
- Include clear code comments and consistent formatting
- Preserve the included sample text files for testing

SAMPLE OUTPUT

```
path\to\your\file\ASSIGN1.exe
TABLE OF PRODUCTS (FOR LOOP)
                                          7
Ν
      1
                              5
                                    6
                                                8
                                                      9
                  3
1
      1
            2
                  3
                        4
                              5
                                    6
                                          7
                                                8
                                                      9
2
      2
            4
                  6
                        8
                              10
                                    12
                                          14
                                                16
                                                      18
3
      3
            б
                  9
                        12
                              15
                                    18
                                          21
                                                24
                                                      27
4
      4
            8
                  12
                        16
                              20
                                    24
                                          28
                                                32
                                                      36
5
      5
            10
                  15
                        20
                              25
                                    30
                                          35
                                                40
                                                      45
6
      6
            12
                  18
                        24
                              30
                                    36
                                          42
                                                48
                                                      54
7
      7
            14
                  21
                        28
                              35
                                    42
                                          49
                                                56
                                                      63
8
                                                      72
      8
            16
                  24
                        32
                              40
                                    48
                                          56
                                                64
      9
            18
                  27
                        36
                              45
                                    54
                                          63
                                                72
                                                      81
REVERSED TABLE OF PRODUCTS(WHILE LOOP)
Ν
      9
            8
                  7
                        6
                                    4
                                          3
                                                2
                                                      1
9
      81
                                          27
            72
                  63
                        54
                              45
                                    36
                                                18
                                                      9
8
      72
                                    32
                                          24
                                                16
            64
                  56
                        48
                              40
                                                      8
7
      63
            56
                  49
                        42
                              35
                                    28
                                          21
                                                14
                                                      7
6
      54
                              30
                                    24
                                                12
            48
                  42
                        36
                                          18
                                                      6
5
                              25
                                          15
                                                      5
      45
            40
                  35
                        30
                                    20
                                                10
4
      36
            32
                  28
                        24
                              20
                                    16
                                          12
                                                8
                                                      4
3
      27
            24
                  21
                        18
                              15
                                    12
                                          9
                                                6
                                                      3
2
      18
            16
                  14
                        12
                              10
                                    8
                                          6
                                                      2
1
                  7
                        6
                              5
                                          3
                                                2
                                                      1
Process finished with exit code 0
```

Submission Instructions

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Assignment 1

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