[Quick Links](https://elearn.uta.edu/webapps/assessment/take/launch.jsp?course_assessment_id=_198625_1&course_id=_433428_1&content_id=_7560521_1&step=null" \o "Open Quick Links)

[Logout](https://elearn.uta.edu/webapps/login/?action=logout)

[**24/7 Blackboard Support**](http://uta.edusupportcenter.com/)[**24/7 Collaborate Support**](http://blackboard.force.com/btbb_publichome?dfprod=Collaborate%3EContact%20Blackboard%20Collaborate%20Technical%20Support%3C/a%3E%3C/h3%3E%3Cp%3ETo%20submit%20a%20ticket,%20initiate%20a%20live%20chat,%20or%20speak%20to%20a%20representative%20on%20the%20phone,%20%3Ca%20href=)[Blackboard Resources](http://www.uta.edu/blackboard/)[Log Out](https://elearn.uta.edu/webapps/login?action=logout)

[[](https://elearn.uta.edu/webapps/assessment/take/launch.jsp?course_assessment_id=_198625_1&course_id=_433428_1&content_id=_7560521_1&step=null#global-nav-flyout)Goutami Padmanabhan**1**[Expand Global Nav](https://elearn.uta.edu/webapps/assessment/take/launch.jsp?course_assessment_id=_198625_1&course_id=_433428_1&content_id=_7560521_1&step=null)](https://elearn.uta.edu/webapps/assessment/take/launch.jsp?course_assessment_id=_198625_1&course_id=_433428_1&content_id=_7560521_1&step=null#global-nav-flyout)

|  |  |  |  |
| --- | --- | --- | --- |
| [University of Texas at Arlington](http://www.uta.edu/uta)   |  |  |  | | --- | --- | --- | | [**My BlackboardTab 1 of 3 (active tab)**](https://elearn.uta.edu/webapps/portal/execute/tabs/tabAction?tab_tab_group_id=_50_1) | [Students](https://elearn.uta.edu/webapps/portal/execute/tabs/tabAction?tab_tab_group_id=_118_1) | [Library](https://elearn.uta.edu/webapps/portal/execute/tabs/tabAction?tab_tab_group_id=_63_1) | |

1. [**2188-CSE-2320-002-ALGORITHMS--DATA-STRUCTURES--2018-Fall**](https://elearn.uta.edu/webapps/blackboard/execute/courseMain?course_id=_433428_1)

**[Course-to-Course Navigation](https://elearn.uta.edu/webapps/assessment/take/launch.jsp?course_assessment_id=_198625_1&course_id=_433428_1&content_id=_7560521_1&step=null#contextMenu)**

1. [Quizzes](https://elearn.uta.edu/webapps/blackboard/content/listContent.jsp?course_id=_433428_1&content_id=_7523373_1&mode=reset)

1. **Take Test: Q1\_loopcount**

[Hide Course Menu](https://elearn.uta.edu/webapps/assessment/take/launch.jsp?course_assessment_id=_198625_1&course_id=_433428_1&content_id=_7560521_1&step=null)

* [Refresh](https://elearn.uta.edu/webapps/assessment/take/launch.jsp?course_assessment_id=_198625_1&course_id=_433428_1&content_id=_7560521_1&step=null)
* [Display Course Menu in a Window](https://elearn.uta.edu/webapps/assessment/take/launch.jsp?course_assessment_id=_198625_1&course_id=_433428_1&content_id=_7560521_1&step=null)

[**2188-CSE-2320-002-ALGORITHMS--DATA-STRUCTURES--2018-Fall**](https://elearn.uta.edu/webapps/assessment/take/launch.jsp?course_assessment_id=_198625_1&course_id=_433428_1&content_id=_7560521_1&step=null)

**[Course Entry Page](https://elearn.uta.edu/webapps/blackboard/execute/courseMain?course_id=_433428_1)**

* [Announcements](https://elearn.uta.edu/webapps/blackboard/content/launchLink.jsp?course_id=_433428_1&tool_id=_108_1&tool_type=TOOL&mode=view&mode=reset)
* [Syllabus](https://elearn.uta.edu/webapps/blackboard/content/listContent.jsp?course_id=_433428_1&content_id=_6959178_1&mode=reset)
* [Course Materials](https://elearn.uta.edu/webapps/blackboard/content/listContent.jsp?course_id=_433428_1&content_id=_6959180_1&mode=reset)
* [Quizzes](https://elearn.uta.edu/webapps/blackboard/content/listContent.jsp?course_id=_433428_1&content_id=_7523373_1&mode=reset)
* [Grades](https://elearn.uta.edu/webapps/blackboard/content/launchLink.jsp?course_id=_433428_1&tool_id=_130_1&tool_type=TOOL&mode=view&mode=reset)
* [Echo360 Recordings](https://elearn.uta.edu/webapps/blackboard/content/launchLink.jsp?course_id=_433428_1&tool_id=_3547_1&tool_type=TOOL&mode=view&mode=reset)
* [Discussions](https://elearn.uta.edu/webapps/blackboard/content/launchLink.jsp?course_id=_433428_1&tool_id=_116_1&tool_type=TOOL&mode=view&mode=reset)
* [Groups](https://elearn.uta.edu/webapps/blackboard/content/launchLink.jsp?course_id=_433428_1&tool_id=_114_1&tool_type=TOOL&mode=view&mode=reset)
* [UTA Email](https://elearn.uta.edu/webapps/blackboard/content/launchLink.jsp?course_id=_433428_1&tool_id=_109_1&tool_type=TOOL&mode=view&mode=reset)
* [Student Help and Resources](https://elearn.uta.edu/webapps/blackboard/content/listContent.jsp?course_id=_433428_1&content_id=_7018298_1&mode=reset)
* [Degree Map](https://utadm.civitaslearning.com/)

**Take Test: Q1\_loopcount**

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[**[https://elearn.uta.edu/images/spacer.gif](https://elearn.uta.edu/webapps/assessment/take/launch.jsp?course_assessment_id=_198625_1&course_id=_433428_1&content_id=_7560521_1&step=null)Test Information**](https://elearn.uta.edu/webapps/assessment/take/launch.jsp?course_assessment_id=_198625_1&course_id=_433428_1&content_id=_7560521_1&step=null)

|  |  |
| --- | --- |
| Description | Identify the number of iteration of various loops and the function of N that approximates the number of iterations.  This test will show code (loops) and ask questions about it.  It is recommended that you give an answer on paper, next verify it by running the code and then you put your answer in Blackboard. Be prepared to write and run C code during the test.  Note that the test has unlimited submissions, but it uses ONLY THE FIRST SUBMISSION in grading (the earned score will be that from the first submission) as the quiz score. |
| Instructions |  |
| Multiple Attempts | This test allows multiple attempts. |
| Force Completion | This test can be saved and resumed later. |

Expand Question Completion Status:

**QUESTION 1**

1. The code below will be used for this and the next 2 questions:  
       for(k = 0, x = 0; k <= 90; k = k + 15){  
           printf("%d,", k);  
           x = x +1;  
       }  
      
   List the values of k separated only by comma, eg: 1,2,3. Do not leave any spaces.



**5 points**

**QUESTION 2**

1. How many iterations will the above loop execute (i.e. How many different values of k will it print)?



**5 points**

**QUESTION 3**

1. Imagine that 90 is replaced by N in the above loop, so we have:  
       for(k = 0, x = 0; k <= 90; k = k + 15){  
           printf("%d,", k);  
           x = x +1;  
       }  
      
    Which of the functions below gives the closest approximation of the number of iterations of the loop?

|  |  |  |
| --- | --- | --- |
|  |  | log\_{15}(N) |
|  |  | N/15 |
|  |  | N |
|  |  | N+15 |
|  |  | N\*15 |

**10 points**

**QUESTION 4**

1. The code below will be used for this and the next 2 questions:  
       for(k = 300, x = 0; k >= 0; k = k - 25){  
           printf("%d,", k);  
           x = x +1;  
       }  
      
   List the values of k separated only by comma, eg: 1,2,3. Do not leave any spaces.



**5 points**

**QUESTION 5**

1. How many iterations will the above loop execute (i.e. How many different values of k will it print)?



**5 points**

**QUESTION 6**

1. Imagine that 300 is replaced by N in the above loop, so we have:  
       for(k = N, x = 0; k >= 0; k = k - 25){  
           printf("%d,", k);  
           x = x +1;  
       }  
      
    Which of the functions below gives the closest approximation of the number of iterations of the loop?

|  |  |  |
| --- | --- | --- |
|  |  | log\_{25}(N) |
|  |  | N/25 |
|  |  | N |
|  |  | N-25 |
|  |  | N\*25 |

**10 points**

**QUESTION 7**

1. The code below will be used for this and the next 2 questions:  
       for(k = 1, x = 0; k <= 128; k = k \* 2){  
           printf("%d,", k);  
           x = x +1;  
       }  
      
   List the values of k separated only by comma, eg: 1,2,3. Do not leave any spaces.



**5 points**

**QUESTION 8**

1. How many iterations will the above loop execute (i.e. How many different values of k will it print)?



**5 points**

**QUESTION 9**

1. Imagine that 128 is replaced by N in the above loop, so we have:  
       for(k = 1, x = 0; k <= N; k = k \* 2){  
           printf("%d,", k);  
           x = x +1;  
       }  
      
    Which of the functions below gives the closest approximation of the number of iterations of the loop?

|  |  |  |
| --- | --- | --- |
|  |  | log\_2(N) |
|  |  | N/2 |
|  |  | N |
|  |  | N+2 |
|  |  | N\*2 |

**10 points**

**QUESTION 10**

1. The code below will be used for this and the next 2 questions:  
       for(k = 2401, x = 0; k >= 1; k = k / 7){  
           printf("%d,", k);  
           x = x +1;  
       }  
      
   List the values of k separated only by comma, eg: 1,2,3. Do not leave any spaces.



**5 points**

**QUESTION 11**

1. How many iterations will the above loop execute (i.e. How many different values of k will it print)?



**5 points**

**QUESTION 12**

1. Imagine that 2401 is replaced by N in the above loop, so we have:  
       for(k = N, x = 0; k >= 1; k = k / 7){  
           printf("%d,", k);  
           x = x +1;  
       }  
      
    Which of the functions below gives the closest approximation of the number of iterations of the loop?

|  |  |  |
| --- | --- | --- |
|  |  | log\_7(N) |
|  |  | N/7 |
|  |  | N |
|  |  | N+7 |
|  |  | N\*7 |

**10 points**

**QUESTION 13**

1. The code below will be used for this and the next 2 questions:  
       for(k = 1, x = 0; k <= pow(2,10); k = k \* 2){  
           printf("%d,", k);  
           x = x +1;  
       }  
      
   List the values of k separated only by comma, eg: 1,2,3. Do not leave any spaces.



**5 points**

**QUESTION 14**

1. How many iterations will the above loop execute (i.e. How many different values of k will it print)?



**5 points**

**QUESTION 15**

1. Imagine that ~~128~~   10 is replaced by N in the above loop, so we have:  
       for(k = 1, x = 0; k <= pow(2,**N**); k = k \* 2){  
           printf("%d,", k);  
           x = x +1;  
       }  
      
    Which of the functions below gives the closest approximation of the number of iterations of the loop?

|  |  |  |
| --- | --- | --- |
|  |  | log\_2(N) |
|  |  | N/2 |
|  |  | N |
|  |  | N\*2 |
|  |  | N^2 |

**10 points**

*Click Save and Submit to save and submit. Click Save All Answers to save all answers.*



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**24X7 Bb Support**