

Test Cases for Lab Test on 14 November

Question 1 (LCM)

- 2 81 81

Output : 162

- 15 33 55

Output : 165

- 100 5 3

Output : 300

- 24 3 8

Output : 24

- 10 3 7

Output : 210

- 19 361 2

Output : 722

Question 2 (Hollow Cylinder)

- (a) 4 0.5

Output :

The radius of cylinder A = 4; and height of cylinder A = 0.5.

The Surface area of Cylinder A is = 113.04....

The volume of cylinder A is = 25.12.....

The Cylinder A **CAN NOT** enclose cylinder B.

- (b) 4 2

Output :

The radius of cylinder A = 4.0; and height of cylinder A = 2.0

The Surface area of Cylinder A is = 150.72...

The volume of cylinder A is = 100.48.....

The Cylinder A **Can** enclose cylinder B.

Question 3 (Generalized Combinations)

case-1 abc 4 1 2

Output :

[a,a,b,c]
[a,b,b,c]
[a,b,c,c]

case-2 abc 3 0 2

Output :

[a,a,b]
[a,a,c]
[a,b,b]
[a,b,c]
[a,c,c]
[b,b,c]
[b,c,c]

case-3 abcd 8 2 10

Output :

[a,a,b,b,c,c,d,d]

case-4 abc 3 1 50

Output :

[a,b,c]

case-5 abcdef 7 1 30

Output :

[a,a,b,c,d,e,f]
[a,b,b,c,d,e,f]
[a,b,c,c,d,e,f]
[a,b,c,d,d,e,f]
[a,b,c,d,e,e,f]
[a,b,c,d,e,f,f]

Grading Policy

Question 1 [MARKS = 12]

For question 1, grading is totally based on the test cases : Each test case carries 2 marks.

Question 2 (MARKS = 12) Each test case has 2 marks, the remaining 8 marks are distributed as follows.

1. 1 marks for attributes (they must be **private**)
2. 2 marks for constructors (one mark per constructor)
3. 1 mark for non-static method **radius**
4. 1 marks for non-static method **Area**
5. 1 mark for non-static method **Volume**

6. 2 mark for non-static method **Encloses**

Question 3 (MARKS=16) The test cases will have 10 marks distributed uniformly, that is, each correct test case carries 2 marks. The remaining 6 marks are distributed as follows.

1. 1 mark for compiling (to be checked by TA)
2. 1 marks for indentation
3. 2 marks for Logic.
4. 2 marks for invoking recursion.