Analysis

Simulation

Input:

rad = 10cm, hei = 25cm

Process :

Area = 2 \* pi \* 10^2 + 2 \* 10 \* 25

Volume = pi \* 10^2 + 25

Output:

Area = 3544.73

Volume = 7854.00

Input: radius -🡪 rad, height -🡪 hei

Output: Area = 2000cm

Volume = 2000cm

Process =

pi = 3.1416

Area = 2 \* pi \* rad^2 + 2 \* rad \* hei

Volume = pi \* rad^2 \* hei

Flowchart:

**A**

Start

Pseudocode:

Variables used:

rad, hei, vol, area, pi are numeric

Begin:

Initialization:

pi = 3.1416

Input:

Display “Enter radius”

accept rad

Display “Enter height”

accept hei

Process:

area = 2 \* pi \* (rad \* rad) + 2 \* pi \* rad \* hei

vol = pi \* (rad \* rad) \* hei

Output:

Display “Surface Area:”, area

Display “Surface Volume:”, vol

End.

Output area, vol

pi = 3.1416

End

**A**

area = 2 \* pi \* (rad \* rad) + 2 \* pi \* rad \* hei

vol = pi \* (rad \* rad) \* hei

Input rad, hei