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: 12345 ---> num

Output:

= 54321

Process =

while (num > 0) do

begin

rem = 12345 % 10 ---> 5

num = 12345 / 10 ---> 1234

end

Flowchart:

Pseudocode:

Variables used:

num, rem are numeric.

Begin:

Initialization:

rem = 0

Input:

Display “Input a positive number”

accept num

Process:

while (num < 0) do

begin

Display"Invalid input! Try again."

accept num

end

display "Reverse order is:"

while (num > 0) do

begin

rem = num % 10

num = num / 10

display rem

end

End.

Output:

Display “Surface Area:”, area

Display “Surface Volume:”, vol

End.

**A**

Start

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