

(vi) Algorithm for shapes

- step-1 : SET run = 1.
- step-2 : Repeat step-1 while run = 1.
- step-3 : SET $\pi = 3.14$.
- step-4 : Input r, h from the user.
- step-5 : switch for the value of choice.
- step-6 : If the user enters 1.
SET $\text{Area} = 2 * \pi * r * h + 2 * \pi * r^2$
SET $\text{volume} = 2 * \pi * r^2 * h$.
PRINT Area and volume.
- step-7 : If the user enters 2.
SET $\text{Area} = \pi * r * (r + \sqrt{h^2 + r^2})$
SET $\text{volume} = (\pi * r^2 * h) / 3$.
PRINT Area and volume.
- step-8 : If the user enters 3.
SET $\text{Area} = 4 * \pi * r^2$.
SET $\text{volume} = (4/3) * \pi * r^3$.
PRINT Area and volume.
- step-9 : while run = 0 exit from the Program.
- step-10 : PRINT Invalid shape and exit from the Program.