

## TEST 2 Samples – Part 2 Develop Program Based on Provided Flowchart

Write a program to calculate the volume of box and cylinder with input/output specifications as described below:

```
Command Prompt
D:\temp\SECJ1013\Topic4>assg2
b - Box
c - Cylinder
Choose object (b/c): k
b - Box
c - Cylinder
Choose object (b/c): b
Width: 0
Width: 2
Height: -1
Height: 3
Length: 4
Volume of box = 24
D:\temp\SECJ1013\Topic4>assg2
b - Box
c - Cylinder
Choose object (b/c): c
Radius: 3
Length: 4
Volume of cylinder = 113.04
D:\temp\SECJ1013\Topic4>_
```

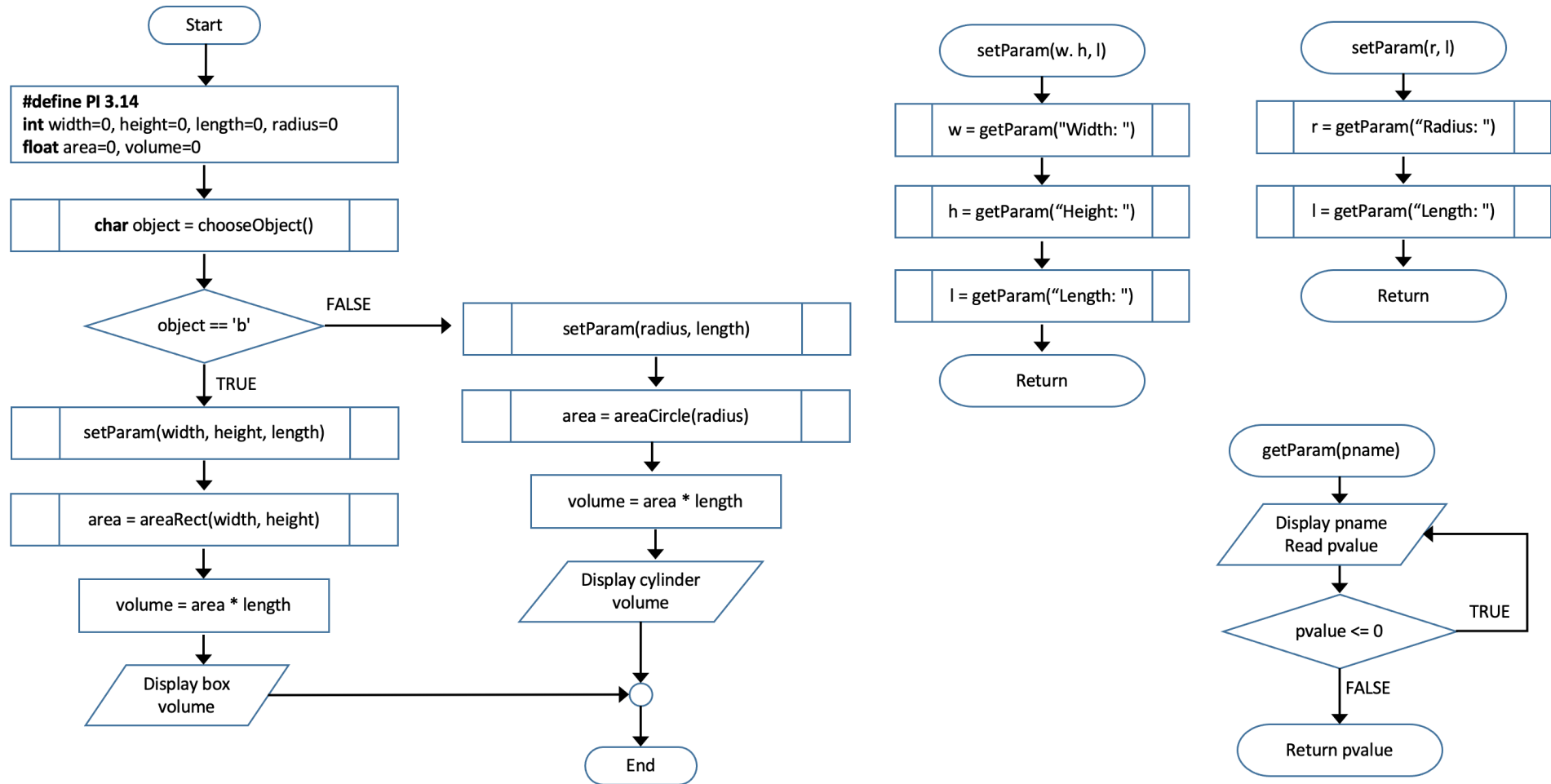
Repeatedly asking users for valid selection of object: 'b' for box and 'c' for cylinder

Repeatedly asking users for valid input of object parameters (must be an integer > 0)

Calculate and display the volume of the object based on the inputs given by the users:  
box volume => width \* height \* length => 2 \* 3 \* 4 => 24

Example of input and output for cylinder

Your program must be written by following the specifications and logic as depicted in the below flowchart:



Below is the skeleton of C++ code that you can use to solve the problem given in this sample of question.

```
// SECJ1013-PT1-Test 2 Part 2 (20202021-1)

#include <iostream>
#include <string>
#define PI 3.14
using namespace std;

// function prototypes
float areaCircle(int);
float areaRect(int, int);
int getParam(string);
void setParam(int &, int &);
void setParam(int &, int &, int &);
char chooseObject();

// start main function
int main() {
    return 0;
}
```