

Roll no. 84

LAB #1

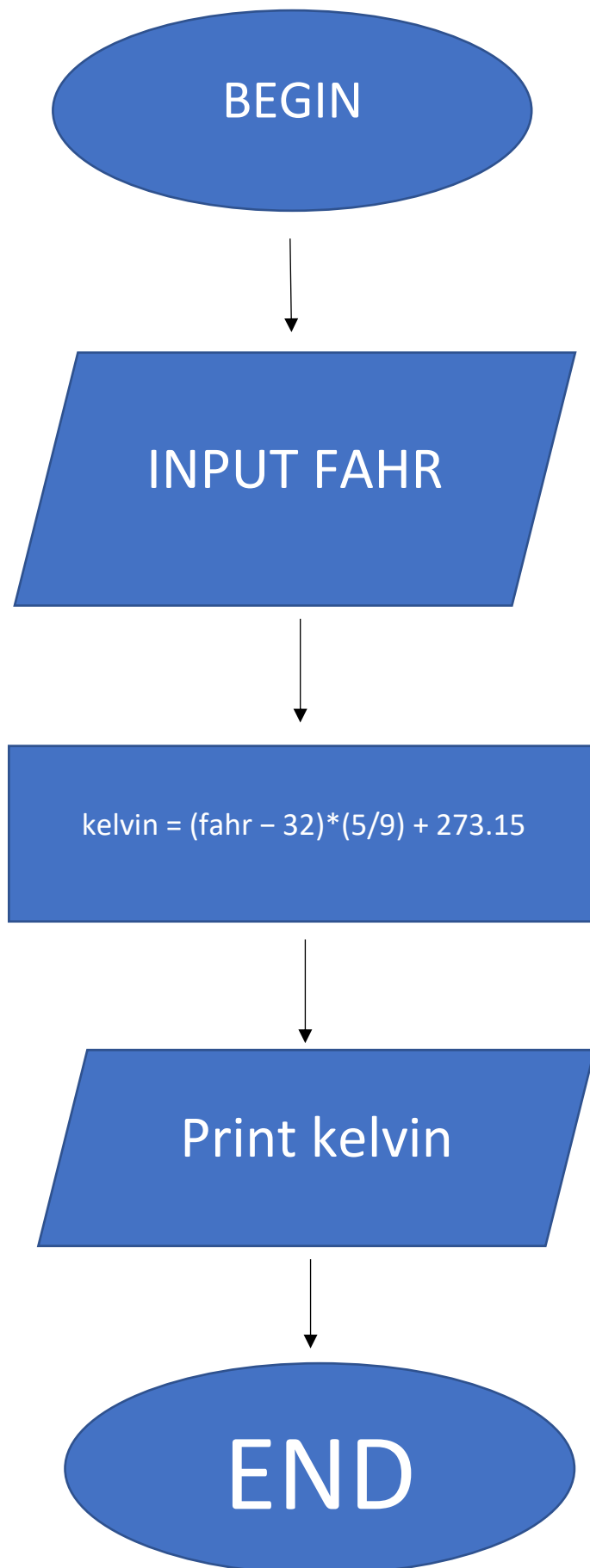
Danyal abbas

Q1. Write Pseudo Code and Flowchart to get temperature in Fahrenheit as input and convert it to Kelvin.

PSUEDO CODE:

1. Begin
2. Input fahr
3. $\text{kelvin} = (\text{fahr} - 32) * (5/9) + 273.15$
4. print kelvin
5. End

FLOWCHART:

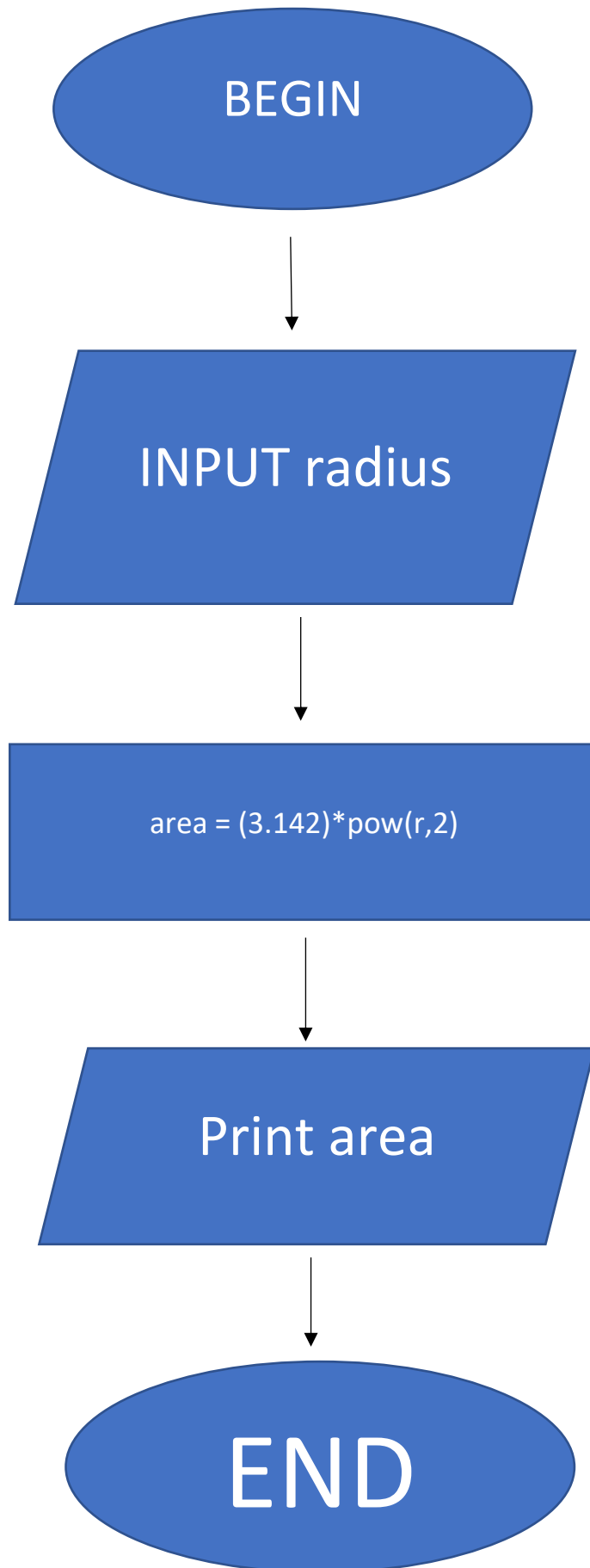


Q2. Write Pseudo Code and Flowchart to calculate the area of a circle with radius taken as input.

PSUEDO CODE:

1. Begin
2. Input radius
3. $\text{area} = (3.142) * \text{pow}(\text{radius}, 2)$
4. print area
5. End

FLOWCHART:

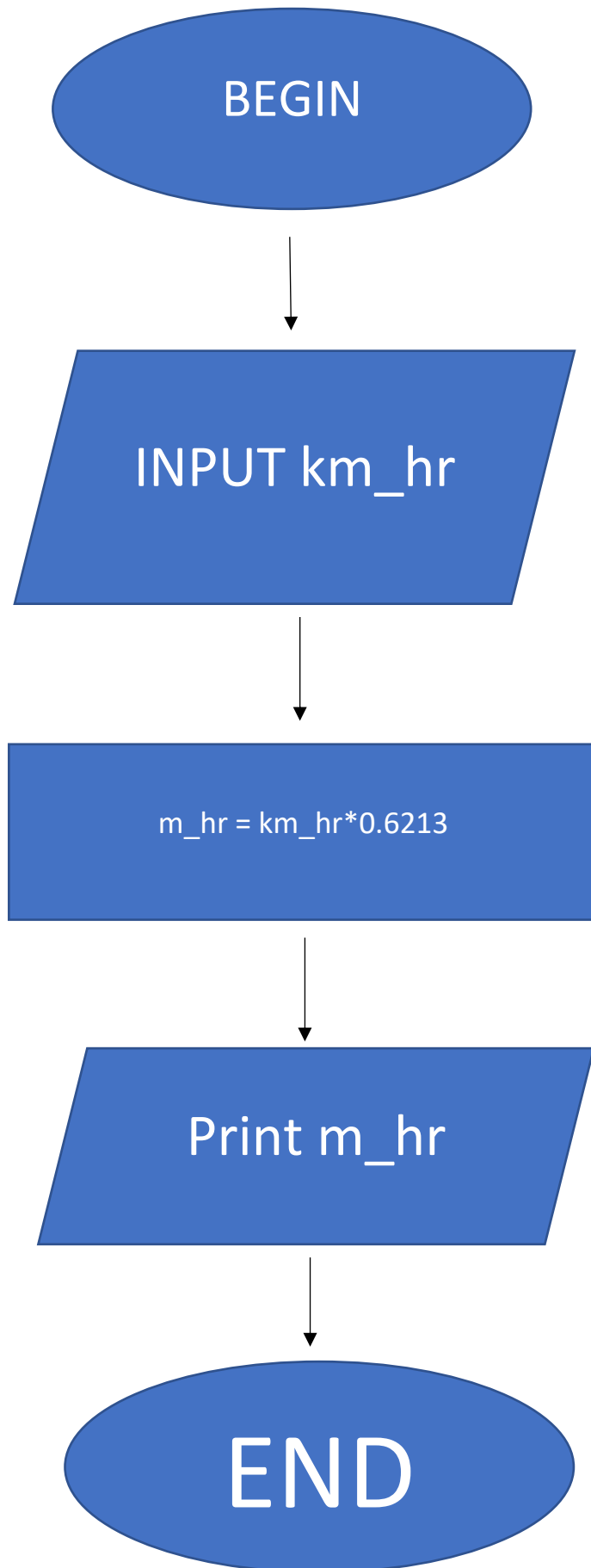


Q3. Write Pseudo Code and Flowchart to convert Km/hour to Miles/hour.

PSUEDO CODE:

1. Begin
2. Input km_hr
3. $m_hr = km_hr * 0.6213$
4. print m_hr
5. End

FLOWCHART:



Q4. Write Pseudo Code, Algorithm and Flowchart to take hours and Minutes as Input and calculate the total number of seconds.

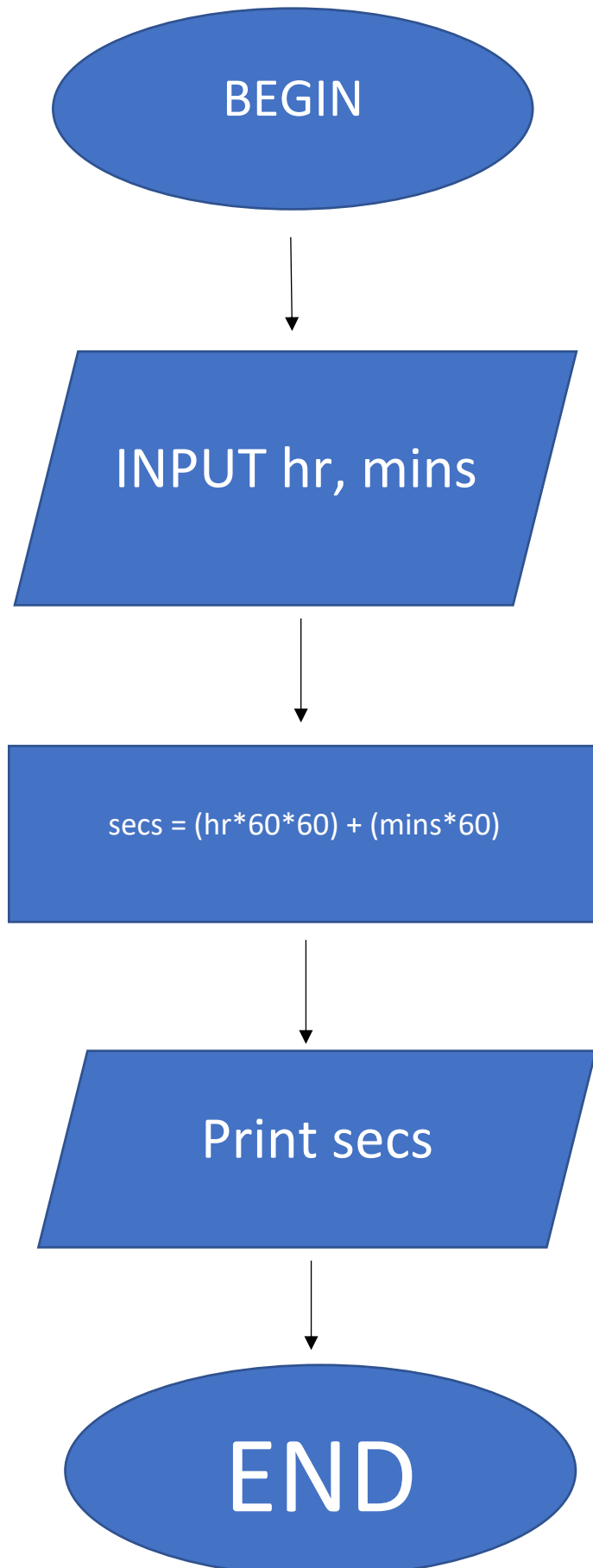
PSUEDO CODE:

1. Begin
2. Input hr, mins
3. $\text{secs} = (\text{hr} * 60 * 60) + (\text{mins} * 60)$
4. print secs
5. End

ALGORITHM:

- Start.
- Initialize two variables (hr and mins) and take user input.
- Use the formula $\text{hr} * 60 * 60$ to convert hour to seconds and $\text{mins} * 60$ to convert minutes to seconds.
- Add both values together.
- Store the value in a new variable named secs.
- Print the variable secs.
- End.

FLOWCHART:

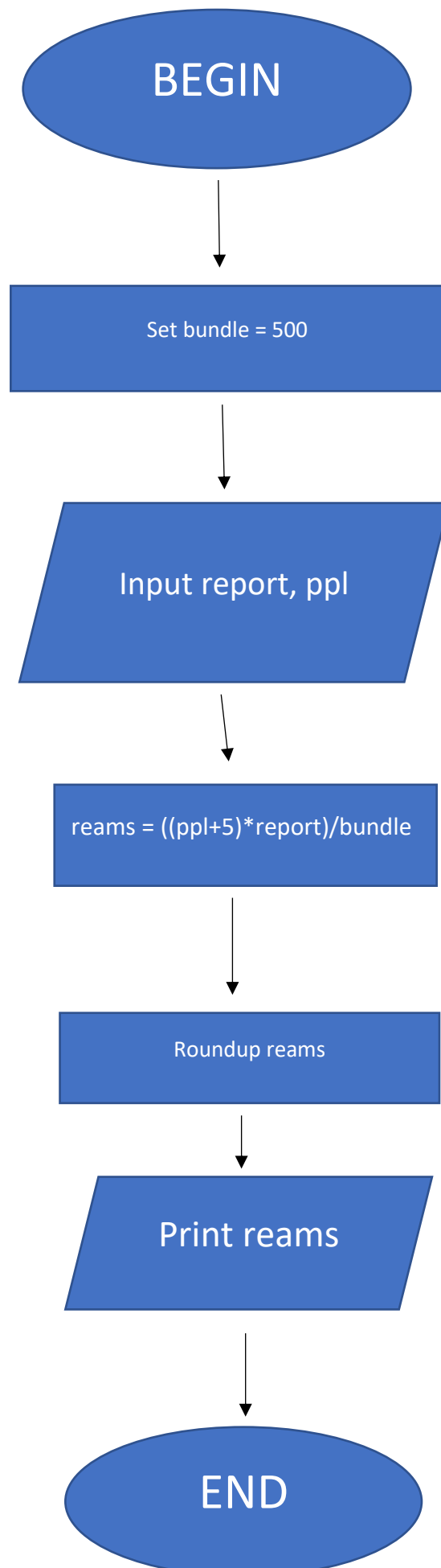


Q5. One of the jobs that Joe Roberts has been given at work is to order special paper for a report for a board meeting. The paper comes in reams of 500 sheets. He always makes five more copies than the number of people that will be there. Joe wants to know how many reams of paper he needs for a meeting. He can order only whole, not partial, reams. Assume the required number of pages will not equal an exact number of reams. Test your solution with the following data: The report is 140 pages long. There will be 25 people at the meeting.

PSUEDO CODE:

1. Begin
2. Set bundle = 500
3. Input report, ppl
4. reams = ((ppl+5)*report)/bundle
5. roundup reams
6. print reams
7. End

FLOWCHART:



Q6. Joe would like to build several bookcases that are of different heights and widths. All will be 12 inches in depth. The bookcases will have three shelves, in addition to the bottom and the top. Write a solution to print the number of feet of 12-inch-wide boards that will Joe need to complete a bookcase, given the height and width.



PSUEDO CODE:

- 1.Begin
- 2.Input height, width
3. $\text{verti} = (2 * \text{height}) / 12$
4. $\text{hori} = (5 * \text{width}) / 12$
5. $\text{total} = \text{verti} + \text{hori}$
- 6.Print total
- 7.End

FLOWCHART:

