**Lab Module 4**

Activity 1

Pseudocode

1. Start
2. Get n1= first integer
3. Get n2= second integer
4. Calculate the square for both integers
5. Calculate the sum of the squares of the integers = n12+n22
6. Calculate the difference of the squares of the integers = n12-n22
7. Display the squares of both integers
8. Display sum of the squares of the integers
9. Display difference of the squares of the integers
10. End

Activity 2

Pseudocode

1. Start
2. Get radius
3. Calculate diameter = radius \* 2
4. Calculate circumference = 2\*pi\*radius
5. Calculate area = pi\*radius2
6. Display diameter
7. Display circumference
8. Display area
9. End

Activity 3

Pseudocode

1. Start
2. Get identity card number
3. Identify date from identity card number = DD
4. Identify month from identity card number = MM
5. Identify year from identity card number = 20+YY
6. Calculate age = 2021 – 20YY
7. Display date of birth = date + month +(20+YY)
8. Display age
9. End

Activity 4

Pseudocode

1. Start
2. Get characters in lowercase
3. Get characters in uppercase
4. Convert lowercase to uppercase
5. Convert uppercase to lowercase
6. Display uppercase characters
7. Display lowercase characters
8. End

Activity 5

Pseudocode

1. Start
2. Get distance in meters
3. Get time in hours
4. Get time in minutes
5. Get time in seconds
6. Calculate total seconds = hours\*3600 + minutes\*60 + seconds
7. Calculate meters per second = distance / total seconds
8. Calculate kilometers per hour = distance / (total seconds/3600)
9. Calculate miles per hour = (distance/1609) / (total seconds / 3600)
10. Display meters per second
11. Display kilometers per hour
12. Display miles per hour
13. End

Activity 6

Pseudocode

1. Start
2. Get value for x1
3. Get value for x2
4. Get value for x3
5. Calculate mean = (x1+x2+x3)/3
6. Calculate variance = [(x12+x22+x32)/3] – mean2
7. Calculate standard deviation = square root of variance
8. Display mean
9. Display variance
10. Display standard deviation
11. End