26/10/2023

1. Addition of three Numbers in Pseudo Code?

1. Begin;

2. Input num1;

3. Input num2;

4. Input num3;

5. Sum = num1 + num2 + num3;

6. Display Sum;

7. End;

2. Average and Percentage: take the marks of a student in five subjects as input and compute the average and percentage. Output both the average and percentage only Pseudo Code

1. Begin;

2. Initialize totalMarks to 0;

3. Initialize numberOfSubjects to 5;

4. Initialize average to 0;

5. Initialize percentage to 0;

6. Initialize subjectCounter to 1;

7. While subjectCounter <= numberOfSubjects

8. Input marks for subject;

9. If marks < 0 or marks > 100

10. Display "Invalid marks entered. Marks must be between 0 and 100.";

11. Terminate program;

12. End If

13. Add marks to totalMarks;

14. Increment subjectCounter by 1;

15. End While

16. Set average to totalMarks divided by numberOfSubjects;

17. Set percentage to (totalMarks / (numberOfSubjects \* 100)) \* 100;

18. Display "Average: ", average;

19. Display "Percentage: ", percentage;

20. End;

3. Find the area and peremeter of circle, rectangle and square?

1. Begin;

2. Input shape;

3. If shape equals "circle"

4. Input radius ;

5. Set pi = 3.14159 ;

6. Set area = pi \* (radius \* radius) ;

7. Set perimeter = 2 \* pi \* radius ;

8. Display area;

9. Display perimeter;

10. Else If shape equals "rectangle"

11. Input length;

12. Input width ;

13. Set area = length \* width .;

14. Set perimeter = 2 \* (length + width);

15. Display area;

16. Display perimeter;

17. Else If shape equals "square"

18. Input side Length ;

19. Set area = side Length \* side Length ;

20. Set perimeter = 4 \* side Length ;

21. Display area;

22. Display perimeter;

23. Else

24. Display "Invalid shape type entered;

25. End;

4. Assignment: .Simple Interest: take the principal amount, rate of interest, and time in years as input and compute the simple interest. Output the result.

1. Begin;

2. Input principalAmount ;

3. Input rateOfInterest ;

4. Input timeInYears ;

5. Set simpleInterest to 0 ;

6. Set rateFraction to rateOfInterest / 100 ;

7. Calculate simpleInterest (principalAmount \* rateFraction \* timeInYears);

8. Display simpleInterest ;

9. End;

5. Assignment: Maximum and Minimum take three numbers as input and find the maximum and minimum of the three. Output both the maximum and minimum.

1. Begin;

2. Input num1 ;

3. Input num2 ;

4. Input num3 ;

5. If num2 > maximum

6. Set maximum to num2 ;

7. End If;

8. If num2 < minimum

9. Set minimum to num2 ;

10. End If;

11. If num3 > maximum

12. Set maximum to num3 ;

13. End If;

14. If num3 < minimum

15. Set minimum to num3 ;

16. End If;

17. Display maximum ;

18. Display minimum ;

21. End;

6.Assignment:  Even or Odd

to take a number as input and determine if it is even or odd. Output "Even" or "Odd" accordingly.

1 Begin;

2. Input number ;

3. If number % 2 equals 0

4. Display "Even" ;

5. Else

6. Display "Odd" ;

7. End If;

8. End;

7.Assignment: Celsius to Fahrenheit Conversion

take a temperature in Celsius as input and convert it to Fahrenheit. Output the result.

1. Begin;

2. Input temperatureCelsius ;

3. Set temperatureFahrenheit to 0 ;

4. Calculate temperatureFahrenheit is (temperatureCelsius \* 9/5) + 32 ;

5. Display "Temperature in Fahrenheit: ", temperatureFahrenheit ;

6. End;

8.Assignment:  Leap Year

take a year as input and determine if it is a leap year or not. Output "Leap Year" or "Not a Leap Year" accordingly.

1. Begin;

2. Input year.;

3. If (year is divisible by 4 and (year is not divisible by 100 or year is divisible by 400))

4. Display "Leap Year" ;

5. Else;

6. Display "Not a Leap Year" ;

7. End If;

8. End;

Assignment: Prime Number

take a number as input and determine if it is a prime number or not. Output "Prime" or "Not Prime" accordingly.

1. Begin;

2. Input number ;

3. If number is less than 2

4. Display "Not Prime" ;

5. Else

6. Set isPrime to true ;

7. Set divisor to 2 ;

8. While divisor \* divisor is less than or equal to number

9. If number is divisible by divisor

10. Set isPrime to false ;

11. Exit Loop;

12. End If;

13. Increment divisor by 1;

14. End While;

15. If isPrime is true

16. Display "Prime”;

17. Else

18. Display "Not Prime";

19. End If;

20. End;

Assignment: Print Numbers 1 to 10 to print numbers from 1 to 10 using a loop.

1. Begin;

2. Set counter to 1 ;

3. While counter <= 10

4. Display counter ;

5. Increment counter by 1 ;

6. End While

7. End;

Assignment: Sum of N Natural Numbers take a positive integer N as input and calculate the sum of the first N natural numbers using a loop. Output the result.

1. Begin;

2. Input N ;

3. Set sum to 0 ;

4. Set counter to 1 ;

5. While counter <= N

6. Add counter to sum ;

7. Increment counter by 1 ;

8. End While

9. Display N + sum;

10. End;