

APCS Lab 2

80%-Level

1. Write a program that prompts the user for two integers, then compute and display:
 - The sum
 - The difference
 - The product
 - The quotient (first number entered divided by the second)
 - The modular quotient
 - The average
 - The distance between the two numbers
 - The maximum of the two numbers
 - The minimum of the two numbers
2. Write a program that generates four random numbers (doubles between 0 and 100), then compute and display the numbers, the sum and the average of the numbers.
3. Write a program that prompts the user for a radius, then compute and display
 - The area and circumference of the circle with that radius
 - The volume and surface area of the sphere with that radius
4. Write a program where the user inputs the number of miles, and the program converts that to kilometers.
5. Write a program which converts the numbers 1, 2, 3, ..., 12 to the corresponding months January, February, March, ..., December.
Hint: Make a very long string "January February March April..." in which you add spaces so that each month name has the same length. Then use *substring* to extract the correct months.

90%-Level

6. Write a program which prompts the user for four integers and then displays the maximum of the four integers.

100%-Level

7. Write a program which prompts the user for an amount of time in milliseconds and then displays the input amount of time in terms of hours (an integer), minutes (an integer) and seconds (a decimal).
Example: the user enters 10000000 milliseconds, the output should read:
10000000 milliseconds is the same as
2 hours, 46 minutes and 40.0 seconds