

Lab Exercise (Chapter 2)

Exercise 1. (2.17 - Arithmetic, Largest Value and Smallest Value)

Description of the Problem

Write an application that inputs three integers from the user and displays the sum, average, product, smallest and largest of the numbers.

Sample Output

```
Enter first integer: 10
Enter second integer: 20
Enter third integer: 30

For the numbers 10, 20 and 30
Largest is 30
Smallest is 10
Sum is 60
Product is 6000
Average is 20
```

Exercise 2. (2.30 – Separating Digits in an Integer)

Description of the Problem

Write an application that inputs one number consisting of five digits from the user, separates the number into its individual digits and prints the digits separated from one another by three spaces each. For example, if the user types in the number 42339, the program should print “4 2 3 3 9.” Assume that the user enters the correct number of digits.

Sample Output

```
Enter five digit integer: 12345
Digits in 12345 are 1 2 3 4 5
```

Exercise 3. (2.25 – Odd Sum and Even Sum)

Description of the Problem

Write an application that reads an integer and determines and prints whether it is odd or even. [*Hint: Use the remainder operator. An even number is a multiple of 2. Any multiple of 2 leaves a remainder of 0 when divided by 2.*]

Hints:

- This program requires one input from the user and an if statement that tests whether the integer is divisible by 2 using the remainder operator.
- Your output should appear as follows:

```
Enter integer: 17
Number is odd
```

```
Enter integer: 14
Number is even
```