

Lab3 – Selection Statements

On Sep. 27th

1. Write a program that calculates how many digits a number contains:

Enter a number: 374

The number 374 has 3 digits

Assume that the number has no more than four digits. *Hint:* Use if statements to test the number. For example, if the number is between 0 and 9, it has one digit. If the number is between 10 and 99, it has two digits.

2. Write a program that receives a time in Seoul (24-hour-time) and converts it into the time in London (12-hour time):

Enter a time in Seoul (24-hour time): 03:45

Time in London (12-hour time): 7:45 PM

Assume that Seoul is 8 hours ahead of London.

3. Using the switch statement, write a program that converts a numerical grade into a letter grade. Use the following grade scale – A (90-100), B (80-89), C (70-79), D (60-69), F (0-59). Print an error message if the grade is larger than 100 or less than 0:

Enter numerical grade: 84

Letter grade: B