İstanbul Bilgi University

Department of Computer Engineering

Fall 2019-2020

CMPE 100: Introduction to Computing

Lecture Exercises04

1. Design a Racket function named **calcWeight** that consumes two numbers, midterm grade (mg) and final grade (fg) of each student as parameters. The function calculates the following formula:

$$calcWeight(mg, fg) = \begin{cases} 1.0 & \text{if } 60 <= (mg + fg)/2 <= 100 \\ 0.6 & \text{if } 40 <= (mg + fg)/2 <= 59 \\ 0.4 & \text{if } 0 <= (mg + fg)/2 <= 39 \end{cases}$$

2. Design a Racket function named **calcTermGrade** that consumes three numbers, midterm (mg), final (fg) and project grade (pg) as parameters. The function calculates the term grade of each student using following formula based on calcWeight function that is defined above.

$calcTermGrade(mg, fg, pg) = mg * 0.3 + fg * 0.5 + pg * calcWeight(mg, fg) * 0.2$