KOÇ UNIVERSITY

COMP 201 - Fall 2021
Lab 7 - Runtime Stack
Due: 13 December 2021
23:59

1 Introduction

Runtime Stack is an important memory concept. In this exercise, you are asked to write an equivalent C language function for given assembly code in *code.asm* file and draw snapshot of the runtime stack for various points in the code indicated by comments in the *code.asm* file.

2 Exercise

2.1 Download exercise.zip from Blackboard

2.2 Unzip it

2.3 Inspect the assembly code in *code.asm* file

2.4 (in *main.c*) Write an equivalent C language function for f

2.5 (in *main.c*) Draw snapshots of the runtime stack for various points in the code indicated by comments in the *code.asm* file

Note: Use the following pattern for drawing the runtime stack. You do not need to show empty spaces. **BOTTOM | ... | RA | variable1 (value1) | variable2 (value2) | RSP (TOP)**

2.6 Zip the updated ”exercise” folder

2.7 Submit your exercise.zip file to Blackboard.