**Take Home Test 1 CSC 342**

Danish Faruqi

April 5, 2021

Start Time and Date: April 2, 2021 1:53pm

End Time and Date: asa

***“I will neither give nor receive unauthorizes assistance on this TEST. I will use only one computing device to perform this TEST. I will not use cell while performing this TEST” - Danish Faruqi***

**Table of Contents**

1. **[Title Page](#Title_Page)**
2. [**Table of Contents**](#Table_of_Contents)
3. [**Objective**](#Objective)
4. [**Part 1 - MIPS**](#MIPS)
   1. [2-2\_1.asm](#MIPS_2_2_1)
   2. 2-2\_2.asm
   3. 2-3\_1.asm
   4. 2-3\_2.asm
   5. 2-5\_2.asm
   6. 2-6\_1.asm
   7. natural\_generator.asm
   8. main\_myadd.asm
5. **Part 2 - x86 Intel on Windows 32-bit**
   1. 2-2\_1.c
   2. 2-2\_2.c
   3. 2-3\_1.c
   4. 2-3\_2.c
   5. 2-5\_1.c
   6. 2-6\_1.c
   7. natural\_generator.c
   8. main\_myadd.c
6. **Part 3 – LINUX, gcc, gdb 64bit on Intel x86-64 ISA**
   1. 2-2\_1.asm
   2. 2-2\_2.asm
   3. 2-3\_1.asm
   4. 2-3\_2.asm
   5. 2-5\_2.asm
   6. 2-6\_1.asm
   7. natural\_generator.asm
   8. main\_myadd.asm
   9. 2-2\_1.c
   10. 2-2\_2.c
   11. 2-3\_1.c
   12. 2-3\_2.c
   13. 2-5\_1.c
   14. 2-6\_1.c
   15. natural\_generator.c
   16. main\_myadd.c
7. **Conclusion**

**Objective**

The objective of this test is to demonstrate the knowledge and compare MIPS, Windows 32bit Intel x86 ISA, and Linux 64bit Intel x86-x64 ISA architectures. Examples from Chapter 2 will help show the different concepts of Mips and C language. Other architectures and features will be present that are compared and highlighted throughout this test.

**Part 1 – MIPS**

**2-2\_1.asm**