DECLARATION

We hereby declare that this submission is our own work and that, to the best of our knowledge and belief, it contains no material previously published or written by another person nor material which to a substantial extent has been accepted for the award of any other degree of the university or other institute of higher learning, except where due acknowledgement has been made in text.

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ABSTRACT

In this project **"TVARAN : AN OPERATING SYSTEM"** we implemented the various basic functionalities provided by an operating system. TVARAN is coded in both C and Assembly language. TVARAN shows booting from ROM, some basic commands and some of the interrupts to handle, and also having ISO image to work independently on other systems. TVARAN provide the booting with string 'TVARAN' having different colour and background for all the characters. Some of the basic commands are also defined which perform the action, according to their definition. TVARAN has been customized according to requirements and provide the basic output as well as application of the resources, having the capability to take input through QEMU and also provide output through it. Some of the basic functionalities for the memory management is being handled by it. Simple interrupts are also defined to overcome the interrupts occurring during the processing of operating system. Interrupt handling is done through interrupt descriptor table (IDT) and interrupt service routine (ISR) for various interrupts

Keywords: VMware, Ubuntu, Terminal, GCC compiler, NASM, GRUB, QEMU