# DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

IIT GUWAHATI



## CS244: SYSTEM PROGRAMMING

#### **Process Scheduler**

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#### Introduction

In this project we tried to make *Primitive Process Scheduler* using Python as our language and Gnuplot to draw graphs. We also made a *Round-Robin Scheduler* for comparision with *Primitive Process Scheduler*.

In the graps we plotted two types of graphs:

- Misses vs Number of processors
- Misses vs Number of tasks.

#### Softwares Requirements

We need Python 2.7, Gnuplot, Gnuplot.py, numpy preinstalled before running the code. Gnuplot is used to make 2-D and 3-D graps where as Gnuplot.py interfaces Gnuplot with python. Numpy gives addition mathematical capabilities to Python.

### Inputs and Outputs

Inputs are given in a *generate.txt* file. The format of input is as follows:

- $1^{st}$  line contains the number of test cases.
- $2^{nd}$  line contains number of processors.
- $3^{rd}$  line contains number of tasks.
- $4^{th}$  line contains processing time.

# Logic and Code Explanation

Round Robin Processor

Primitive Process Scheduler

Possible Improvements