Name :

Purval Madhukar Bhude

Roll No. S20230010193

Subject : CA

Data lab 0

Extracting the files

```
trillioniare@LAPTOP-VUSF240R:/mnt/c/IIITS ASSIGNMENTS/Sem 2/Computer Arch/datalab0$ tar xvf datalab0-handout.tar
datalab0-handout/
datalab0-handout/fshow.c
datalab0-handout/bits.h
datalab0-handout/btest.h
datalab0-handout/README
datalab0-handout/btest.c
datalab0-handout/driver.pl
datalab0-handout/decl.c
datalab0-handout/Driverhdrs.pm
datalab0-handout/Driverlib.pm
datalab0-handout/dlc
datalab0-handout/Makefile
datalab0-handout/ishow.c
datalab0-handout/tests.c
datalab0-handout/bits.c
```

Checking Number of operations per program.

```
trillioniare@LAPTOP-VUSF240R:/mnt/c/IIITS ASSIGNMENTS/Sem 2/Computer Arch/datalab0/datalab0-handout$ ./dlc -e bits.c
dlc:bits.c:180:isPositive: 6 operators
dlc:bits.c:193:bitXor: 8 operators
```

Checking the score and error in program using btest

```
trillioniare@LAPTOP-VUSF240R:/mnt/c/IIITS ASSIGNMENTS/Sem 2/Computer Arch/datalab0/datalab0-handout$ make
gcc -O -Wall -m32 -lm -o btest bits.c btest.c decl.c tests.c
btest.c: In function 'test_function':
btest.c:334:23: warning: 'arg_test_range' may be used uninitialized [-Wmaybe-uninitialized]
  334 |     if (arg_test_range[2] < 1)
      |         ~~~~~~~~~~~~~~^~~
btest.c:299:9: note: 'arg_test_range' declared here
  299 |     int arg_test_range[3]; /* test range for each argument */
      |         ^~~~~~~~~~~~~~
trillioniare@LAPTOP-VUSF240R:/mnt/c/IIITS ASSIGNMENTS/Sem 2/Computer Arch/datalab0/datalab0-handout$ ./btest
Score   Rating  Errors  Function
2       2       0       isPositive
1       1       0       bitXor
Total points: 3/3
```