Command line arguments

please read http://www.tutorialspoint.com/cprogramming/c_command_line_arguments.htm

Hardcoded files are limited in that the user has no choice, lets use command line arguments and pass in the filenames so the user can choose whatever she likes. (much versatile!)

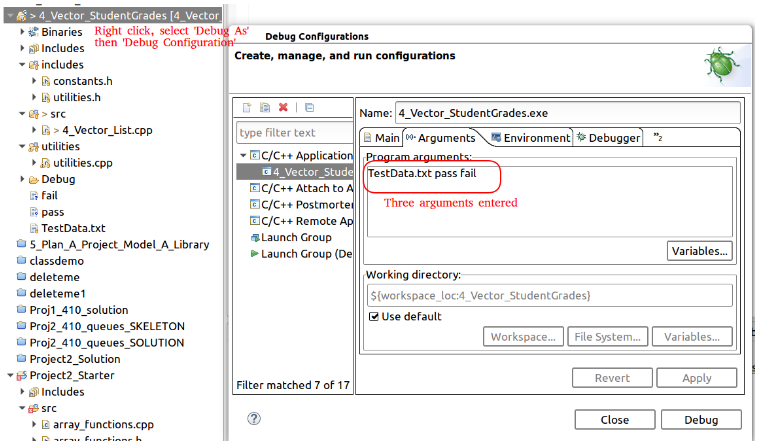
Note the 2 params in the main call now, note also the check to ensure that proper number of arguments passed in and proper error return code if not

```
int main( int argc, char *argv[] )  {
   //argc = how many arguments passed in (including this program)
   //char *argv[] char array of those arguments

   //expect progname infile passfile failfile   //program and 3 arguments, argc=4
   if( argc != EXPECTED_NUMBER_ARGUMENTS ) {
          cout<< WRONG_NUMB_ARGS <<endl;
          return FAIL_WRONG_NUMBER_ARGS;
   }
   string infile = argv[1];
   string Passfile = argv[2];
   string Failfile = argv[3];

   return process_Data(infile,Passfile, Failfile);
}
```

Set up eclipse to pass these arguments in for testing



Right click, select 'Debug As' then 'Debug Configuration'

Debug Configurations

Create, manage, and run configurations

Name: 4_Vector_StudentGrades.exe

Program arguments:

TestData.txt pass fail

Three arguments entered

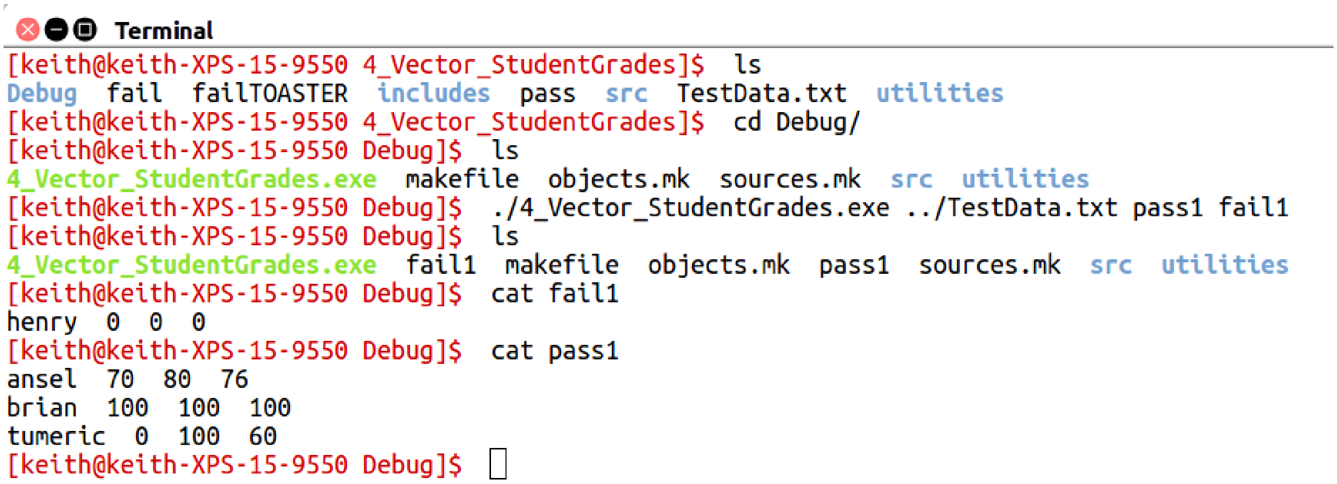
Working directory:

${workspace_loc:4_Vector_StudentGrades}

☑ Use default

Filter matched 7 of 17

Pass at command line (note running from debug dir, and using ../TestData.txt



```
[keith@keith-XPS-15-9550 4_Vector_StudentGrades]$  ls
Debug  fail  failTOASTER  includes  pass  src  TestData.txt  utilities
[keith@keith-XPS-15-9550 4_Vector_StudentGrades]$  cd Debug/
[keith@keith-XPS-15-9550 Debug]$  ls
4_Vector_StudentGrades.exe  makefile  objects.mk  sources.mk  src  utilities
[keith@keith-XPS-15-9550 Debug]$  ./4_Vector_StudentGrades.exe ../TestData.txt pass1 fail1
[keith@keith-XPS-15-9550 Debug]$  ls
4_Vector_StudentGrades.exe  fail1  makefile  objects.mk  pass1  sources.mk  src  utilities
[keith@keith-XPS-15-9550 Debug]$  cat fail1
henry  0  0  0
[keith@keith-XPS-15-9550 Debug]$  cat pass1
ansel  70  80  76
brian  100  100  100
tumeric  0  100  60
[keith@keith-XPS-15-9550 Debug]$  
```