**WeBWorK Notes**

-create outline in PowerPoint

-title goes by

Assignment Number, Question Number (Weight, Number of Attempts)

ie. **A6.Q1 (Weight: 10, Attempts: 3)**

-it is then followed by the description of the problem

ie. **Description: The box in the figure has a height of [$h] in, a width of [$w] in...**

-declare your variables

ie. **Random variables:**

-**$h in [10,40,2];** #height is in the set of numbers between 10 - 40, increments of 2

**-$w in [10,30,3];**

**-$d in [4,30,4];**

**-**show the solution to your answer

ie. **Solution**

**-$vol\_cu\_in=$h\*$w\*$d; (50%)** #the answer is volume in cubic inches; shows formula

**-$vol\_lts = $vol\_cu\_in/61.02; (50%)**

-usually include figure and caption in the slide

-use an editor (Vim the editor recommended)

Sample Webwork code:

##DESCRIPTION

## Using WebWork for instructors.

##ENDDESCRIPTION

##KEYWORDS(‘webwork’, ‘sample’)

## DBsubject(“Electrical Engineering’)

## DBchapter(‘Electrical Engineering’)

## DBsection(‘Volumes’)

## Date(‘2/12/2016’)

## Author(‘L. R. Linares, [lvisl@ece.ubc.ca](mailto:lvisl@ece.ubc.ca)’)

## Institution(‘University of British Columbia’)

DOCUMENT();

loadMacros(

“PGstandard.pl”, #Standard macros for PG language

“MathObjects.pl”,

“PGML.pl”,

“parserPopUp.pl”,

“weightedGrader.pl”,

#”source.pl”, # allows code to be displayed on certain sites

#”PGcourse.pl”, # customization file for the course

);

# Print problem number and point value (weight) for the problem

TEXT(beginproblem());

# Show which answers are correct and which ones are incorrect

$showPartialCorrectAnswers = 1;

# Setup

Context(“Complex”); # Or Context(“Numeric”);

Context()->flags->set(tolerance => .02); # tolerance percent (here it is 2%)

#---- Random variables for this problem --------#

$a = Real(random(10,40,2));

#---- Formulas to compute answers --------------#

$In=(480\*\*2/$a)\*(20000/480)\*\*2;

#---- Answers to the problem -----------------------#

$ans1 = Real($In);

BEGIN\_PGML #where you write the description of the problem

Description of the problem in terms of the random variables

\*Caption to the figure\* #keep the asterixes

[@ image( “figure.png”, width=>312, height=>94) @]\*

\* (a) Student answer ….. :\* [\_\_\_\_\_\_] [‘’units’’]

END\_PGML

WEIGHTED\_ANS($ans1->cmp(), 50);

WEIGHTED\_ANS($ans2->cmp(), 50);

ENDDOCUMENT();

Save as Perl file (language of Webwork)

**To upload a question to Webwork:**

Go to Webowrk → File Manager → local/→ Directory of assignment → Choose File → Choose Perl file and pngs → Homework Set Editor → Click on Directory of assignment’s number of questions → Add blank problem template → Source File → local/directory of assignment/name of perl file

**Visual Studio Code**

**Extensions**

-perl.enable enable/disable this extension

-perl.sshAddr ip address of remote system

-perl.sshPort optional, port for ssh to remote system

-perl.sshUser user for ssh login

-perl.sshCmd defaults to ssh on unix and plink on windows

-perl.sshWorkspaceRoot path of the workspace root on remote system

-perl.perlCmd defaults to perl

-perl.sshArgs optional arguments for ssh

-perl.pathMap mapping of local to remote paths

-perl.perlInc array with paths to add to perl library path

-perl.fileFilter array for filtering perl file, defaults to [.pm,pl]

-perl.ignoreDirs directories to ignore, defaults to [.vscode, .git, .svn]

-perl.debugAdapterPort port to use for connection between vscode and debug adapter inside Perl::LanguageServer. On a multi user system every user must use a different port

-perl.logLevel log level 0-2

**Debugger Settings for launch.json**

-type needs to be perl

-request only launch is supported (this is a restriction of perl itself)

-name name of this debug configuration

-program path to perl program to start

-stopOnEntry if true, program will stop on entry

-args optional, array with arguments for perl program

-env optional, object with environment settings

-cwd optional, change working directory

-reloadModules if true, automatically reload changed Perl modules while debugging