

## Google Groups

## 9 Assignments given by Sir on 2nd July 2017

Seminar-Admin Astromedicomp

Posted in group: Real Time Rendering OpenGL 2017 course Astromedicomp

Hello All,

Please find 9 assignments given by Sir on 2nd July 2017(yesterday) below.  
Kindly read each and every line carefully.

Thank you.

-----Mail from Sir-----

The following are the assignments for 'RTR Class', to be submitted by Saturday, 8th July, 2017.

Each of the following assignments must be done in a separate program.

Hence, you shall have to submit 9 assignment programs.

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Here are the problem statements for the assignments:

01) A RED colored, full length horizontal line of width 3, passing through the centre of the screen.

02) A GREEN colored, full length vertical line of width 3, passing through the centre of the screen.

03) 20 equally spaced, full length BLUE colored horizontal lines, each of width 1, above and similar to 'Assignment 01').

04) 20 equally spaced, full length BLUE colored vertical lines, each of width 1, to the left and similar to 'Assignment 02').

\*\*\* THOUGH IN CLASS, I HAD SAID "10 LINES", YOU TAKE 20. \*\*\*

05) Combine all four assignments above to obtain a GRAPH PAPER background.

06) Draw a YELLOW bordered (not filled), triangle on the graph paper background as achieved in 'Assignment 05'. The size of the triangle must be the same as the width of the blue lines of the graph paper. The size of the triangle must be half of the width of the blue lines of the graph paper.

07) Draw a YELLOW bordered (not filled), square on the graph paper background as achieved in 'Assignment 05'. The size of the square must be half of the width of the blue lines of the graph paper. The size of the square must be half of the width of the blue lines of the graph paper.

08) Draw a YELLOW bordered (not filled), circle on the graph paper background using GL\_POINTS and the size of the circle must be half of the width of the blue lines of the graph paper.

09) Draw a YELLOW bordered (not filled), circle on the graph paper background using GL\_LINES and the size of the circle must be half of the width of the blue lines of the graph paper. in the RED BOOK 3rd Edition (make changes in it as required) :

```
#define PI 3.1415926535898 //or look for 'M_PI' in 'math.h'
```

```
GLint circle_points = 100; //you can try using 1000 or 10000
```

```
glBegin(GL_LINE_LOOP); //GL_LINES will also do
for(int i=0; i < circle_points; i++)
{
    angle = 2 * PI * i/circle_points;
    glVertex2f(cos(angle), sin(angle));
}
glEnd();
```

Above snippet is the code from Red Book that I was referring to in class yesterday. Use above snippet

NOTE :

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- 1) ALL ABOVE ASSIGNMENTS MUST BE COMPLETED ONLY BY THE CONCEPTS THAT HAVE BEEN TAUGHT IN CLASS UPTIL
- 2) NO UNNECESSARY SELF-JUDGEMENTS AND GUESS WORKS ARE TO BE MADE.
- 3) NO NEED TO 'GOOGLE' ANYTHING.

4) IF YOU WISH, YOU MAY CONTACT YOUR GROUP LEADER FOR ANY DOUBTS, BUT IT MUST BE BEFORE OR UPTO THE 1<sup>ST</sup> WEEK. ANY DOUBT PUT FORTH AFTER WEDNESDAY SHALL BE CONSIDERED AS VOID OR WILL BE CONSIDERED SOLELY BY THE LEADER.

THIS RESTRICTION IS TO ENFORCE YOU TO TRY OUT THE ASSIGNMENTS RIGHT FROM SUNDAY NIGHT OF THAT WEEK NIGHT. IN OTHER WORDS, DO NOT WAKE UP FOR THE COMPLETION OF THE ASSIGNMENTS JUST PRIOR TO THE THURSDAY NIGHT.

**\* THE 4TH NOTE IS NOT ONLY FOR THIS PARTICULAR GROUP OF ASSIGNMENTS, BUT IT SHALL STAND FOREVER, UPTIL THE END OF THE SEMESTER.**

I expect that you see this Google Group at least once everyday, so that you will not miss any last minute updates.

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Regards,

Nihara Kulkarni,

Seminar-Admin, AstroMediComp.