C:\Users\Debby\Documents\Notepad\complex number\pol.cpp - Sublime Text (UNREGISTERED)

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pol.cpp | inputArg.cpp | decrypt.cpp

```cpp
#include <stdio.h>      //printf/scanf
#include <math.h>       //atan
#include <stdlib.h>     //atoi
#include <string.h>     //to use strcmp

#define PI 3.14159265

int main(int argc, char* argv []){

    float r, theta, a, b;                           //x=1 actuall 1, x==1 equal to 1

    if(argc !=4){                                   //x!=1 not equal to 1
        printf("Usage:<program> <CODE> <x> <y>\n\nCONVERTER CODE\n");
        printf("Rec To Pol: pol\nPol To Rec: rec");
        return -1;
    }

    float x = atof(argv[2]);
    float y = atof(argv[3]);


    if(strcmp(argv[1],"pol") ==0){                  //==0 equal !=0 not equal

        //Rect to polar equation
        //r<theta
        r = sqrt(pow(x,2)+pow(y,2));
        theta = atan(y/x)*180/PI;

        printf("Polar Equation\n r<(theta)\n");
        printf("%.2f<(%.2f)", r, theta);
    }

    else if(strcmp(argv[1],"rec") ==0){

        //Polar to Rect equation
```

Window Snip

Line 21, Column 1 Tab Size: 4 C++

```
33      else if(strcmp(argv[1],"rec") ==0){
34
35          //Polar to Rect equation
36          //a+jb
37          a = x*cos(y/180*PI);
38          b = x*sin(y/180*PI);
39
40          printf("Rectangular Equation\n a+j(b)\n");
41          printf("%.2f+j(%.2f)", a, b);
42      }
43
44      else {
45          printf("CONVERTER ERROR\nPlease re-enter the program\n");
46
47      }
48
49
50  return 0;
51  }
```

Command Prompt

```
Microsoft Windows [Version 10.0.17134.706]
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C:\Users\Debby>cd Documents

C:\Users\Debby\Documents>cd Notepad

C:\Users\Debby\Documents\Notepad>cd "complex number"

C:\Users\Debby\Documents\Notepad\complex number>g++ pol.cpp -o a

C:\Users\Debby\Documents\Notepad\complex number>a
Usage:<program> <CODE> <x> <y>

CONVERTER CODE
Rec To Pol: pol
Pol To Rec: rec
C:\Users\Debby\Documents\Notepad\complex number>a pol 3 7
Polar Equation
 r<(theta)
7.62<(66.80)
C:\Users\Debby\Documents\Notepad\complex number>a rec 7.62 66.80
Rectangular Equation
 a+j(b)
3.00+j(7.00)
C:\Users\Debby\Documents\Notepad\complex number>
```