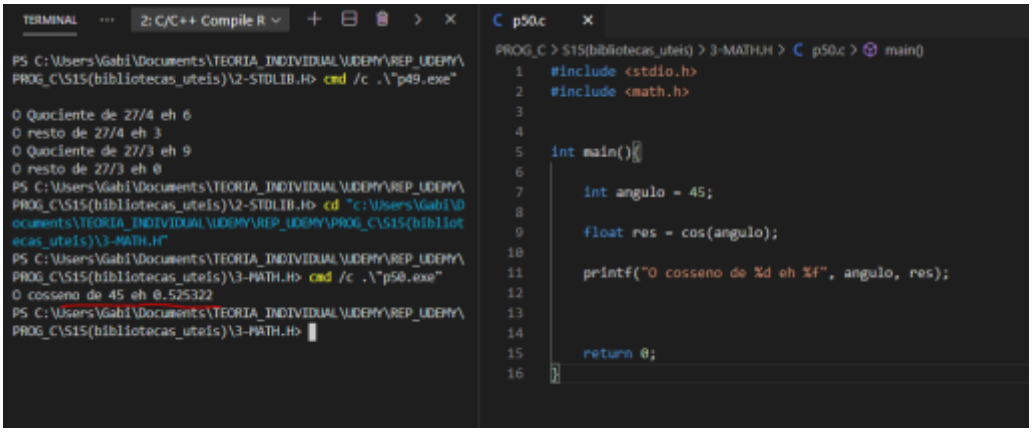
3-MATH.H

- Para utilizar a biblioteca math:
a) Clicar com o botão direito no mouse no projeto C;
b) Ir em C/C++ build -> settings -> libraries
c) Clicar no + e add 'm'
d) aplicar e fechar.

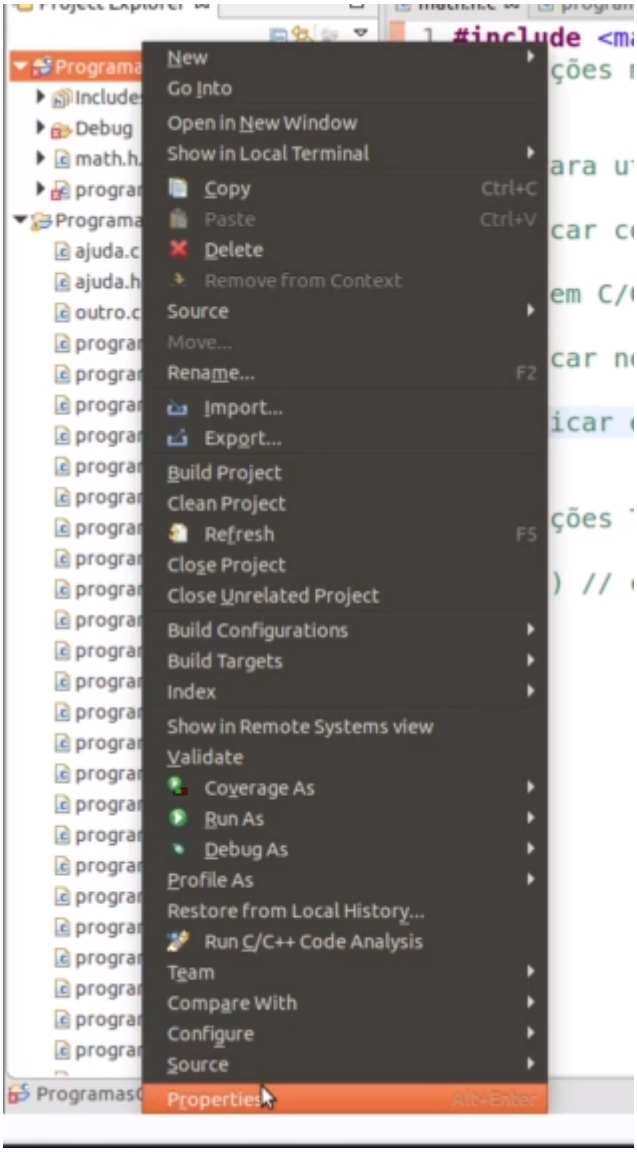
FUNÇÕES MATEMATICAS

//FUNÇÕES TRIGONOMETRICAS

cos() - Calcula o cosseno de um angulo em radianos.



-As vezes quando utilizamos a biblioteca math.h, precisamos fazer uma configuração extra.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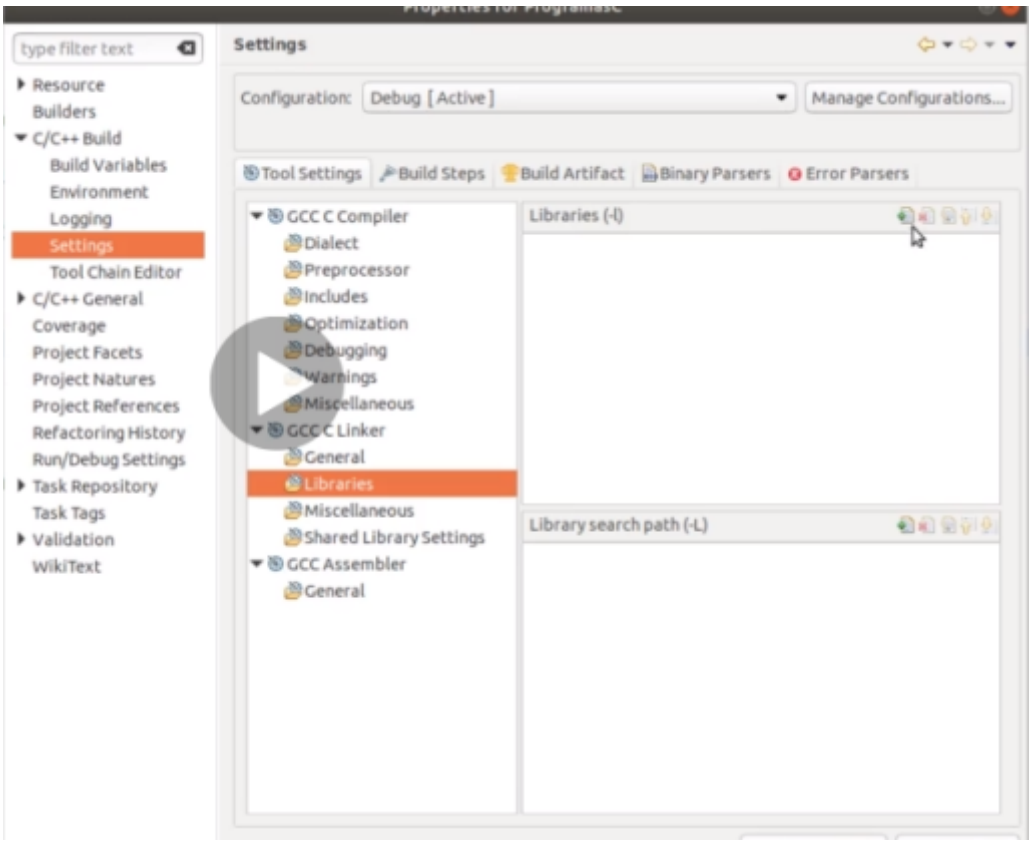
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Task Tags
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Error Parsers
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Preprocessor
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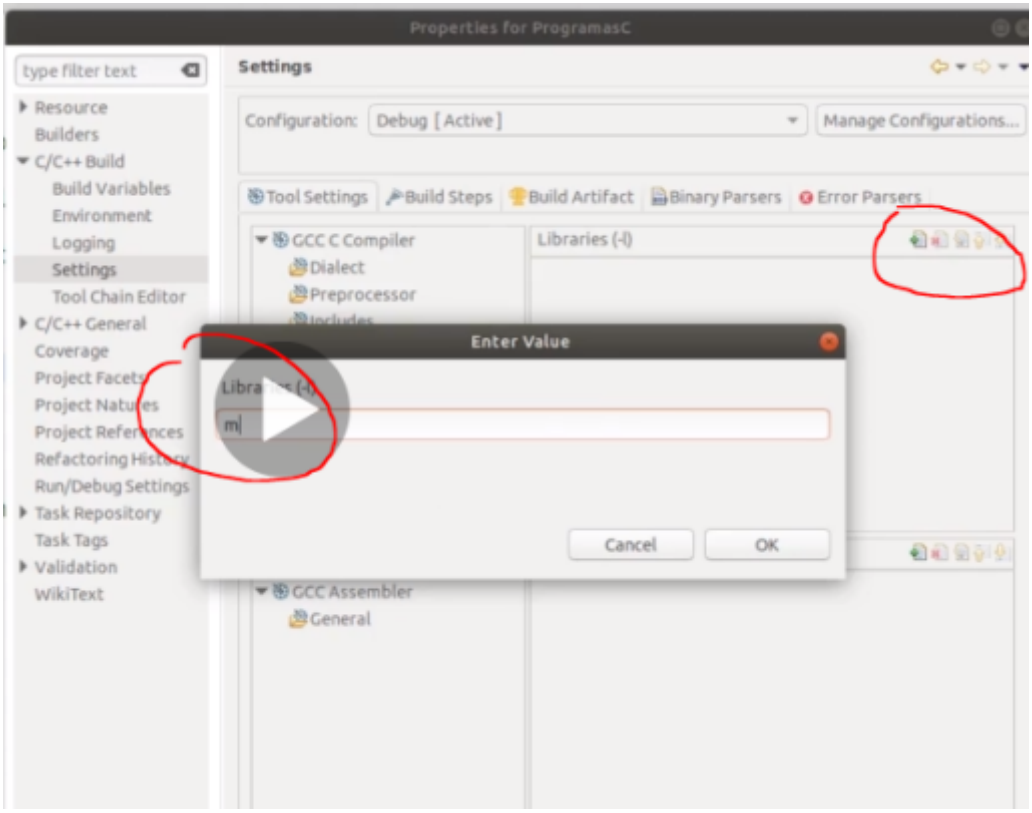

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sin() - Calcula o seno de um angulo em radianos.

p51.c

PROG_C > S15(bibliotecas_uteis) > 3-MATH.H > p51.c > main()

```c
#include <stdio.h>
#include <math.h>


int main(){

    int angulo = 45;

    float res = sin(angulo);

    printf("O cosseno de %d eh %f", angulo, res);



    return 0;
}
```

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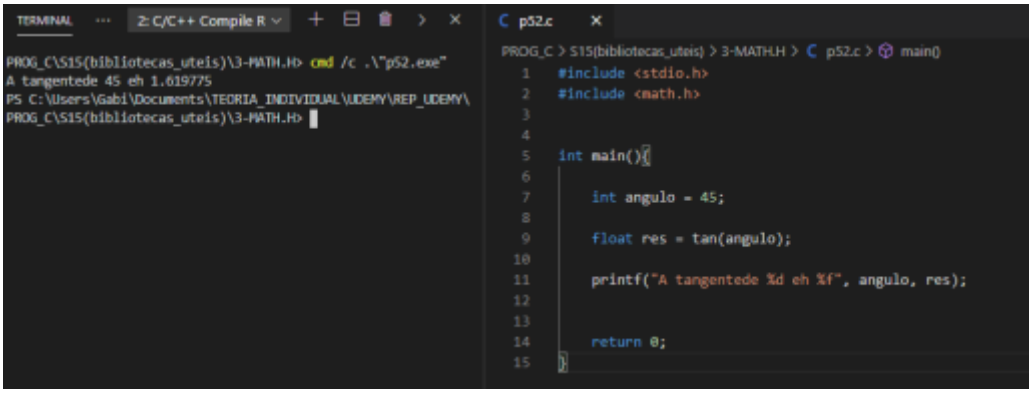
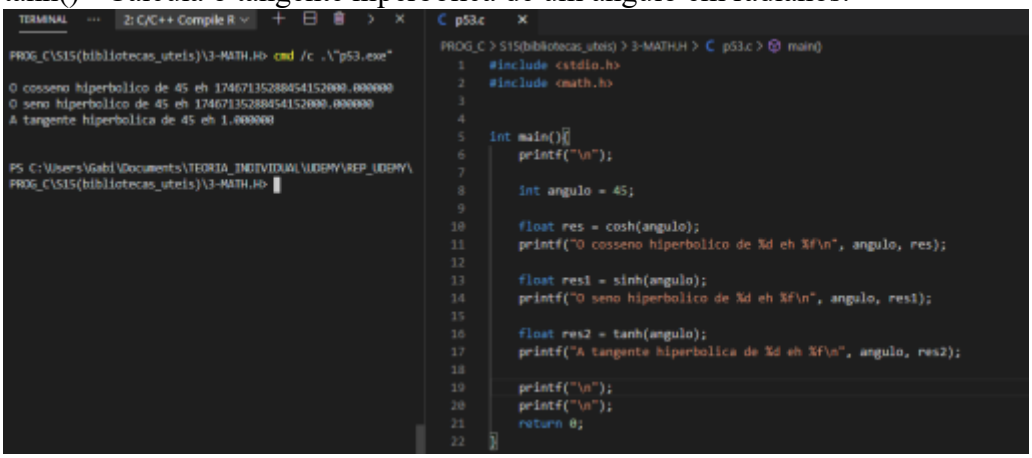
tang() - Calcula a tangente de um angulo em radianos.



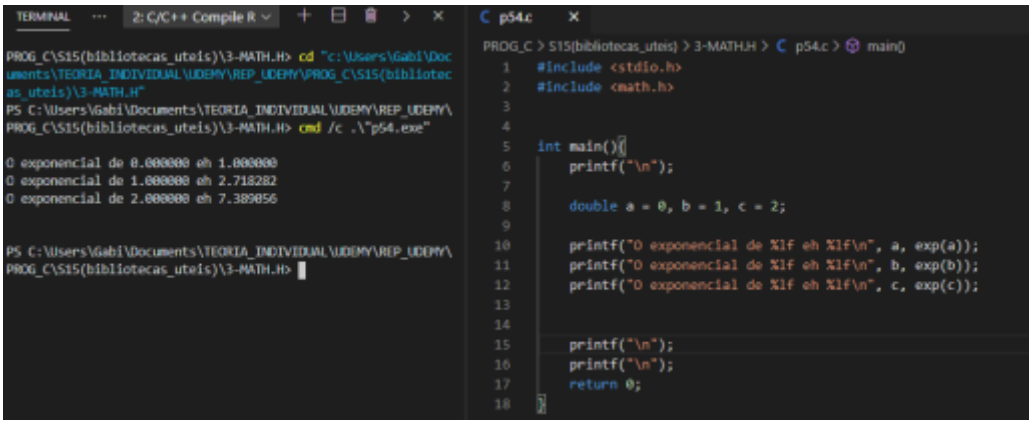
// FUNÇÕES HIPERBOLICAS

cosh() - Calcula o coseno hiperbolico de um angulo em radianos.
sinh() - Calcula o seno hiperbolico de um angulo em radianos.
tanh() - Calcula o tangente hiperbolica de um angulo em radianos.

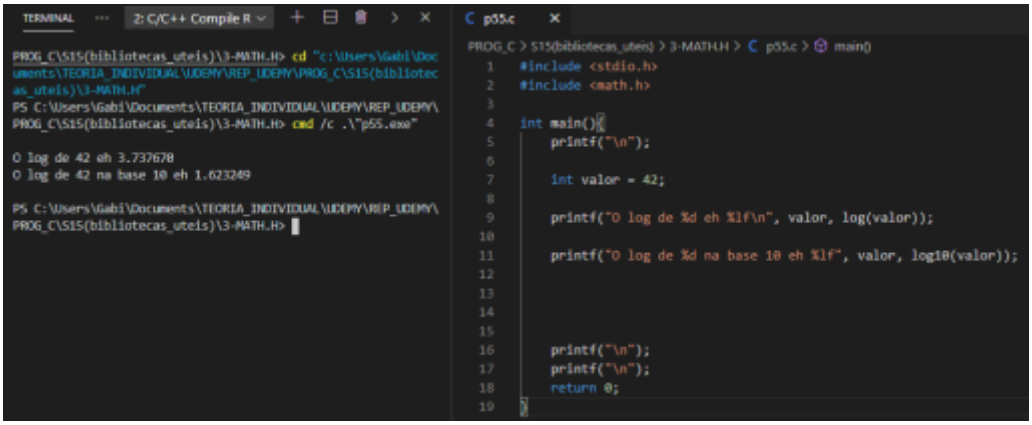


//FUNÇÕES EXPONENCIAIS E LOGARITIMICAS

exp() - função para calculo exponencial.

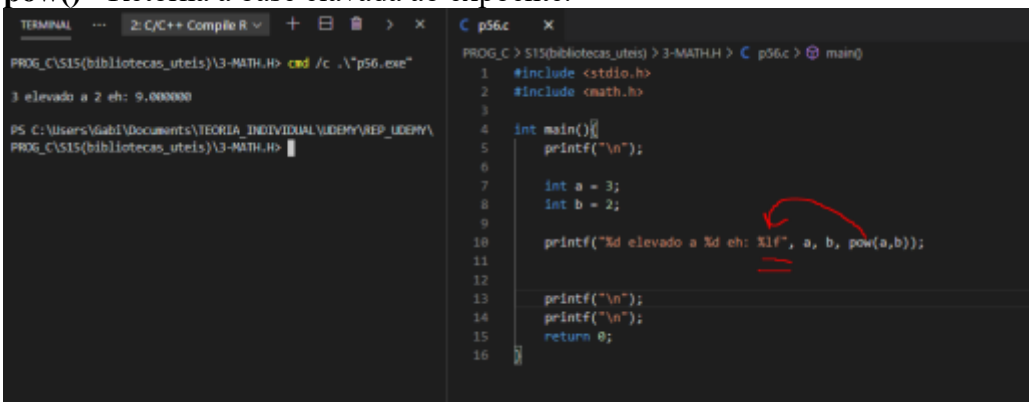


log() - Logaritmo natural
log10() - logaritmo na base 10.

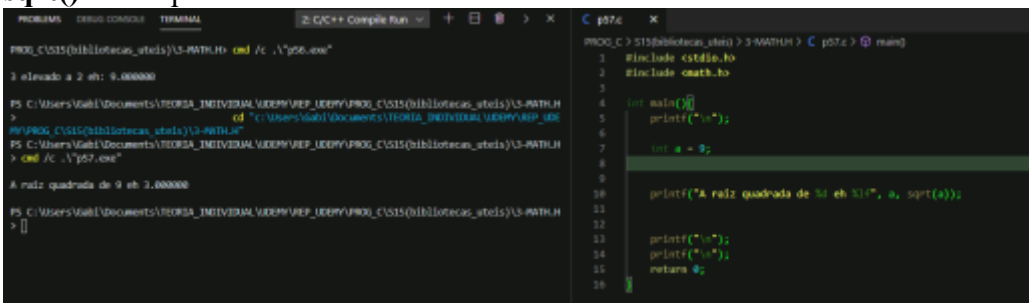


//FUNÇÕES DE POTENCIA

pow() - Retorna a base elavada ao expoente.

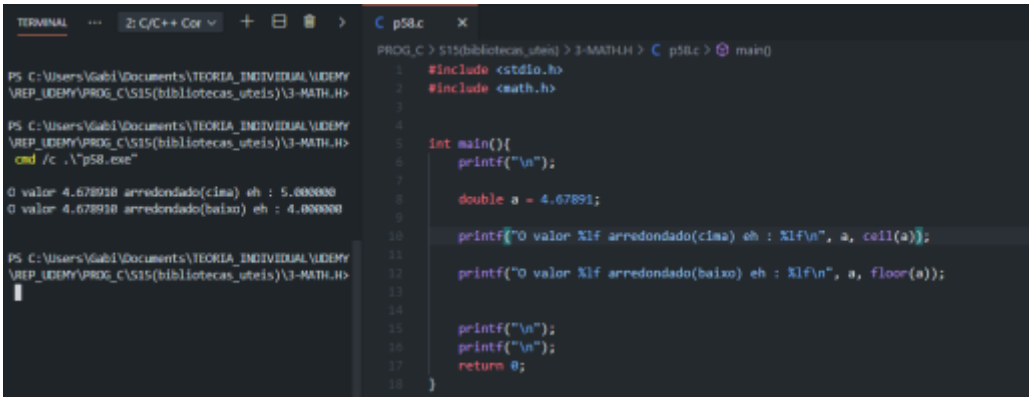


sqrt() - raiz quadrada de um numero.



// FUNÇÕES DE ARREDONDAMENTO VALOR ABSOLUTO E OUTRAS

ceil() - Arredonda para cima um numero.
floor() - arredonda para baixo um numero.


TERMINAL
2: C/C++ Cor
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PS C:\Users\Gabi\Documents\TEORIA_INDIVIDUAL\UDEMY\REP_UDEMY\PROG_C\S15(bibliotecas_uteis)\3-MATH.H>
cmd /c .\"p58.exe"
O valor 4.678910 arredondado(cima) eh : 5.000000
O valor 4.678910 arredondado(baixo) eh : 4.000000
PS C:\Users\Gabi\Documents\TEORIA_INDIVIDUAL\UDEMY\REP_UDEMY\PROG_C\S15(bibliotecas_uteis)\3-MATH.H>
p58.c
PROG_C > S15(bibliotecas_uteis) > 3-MATH.H > p58.c > main()
#include <stdio.h>
#include <math.h>
int main(){
printf("\n");
double a = 4.67891;
printf("O valor %lf arredondado(cima) eh : %lf\n", a, ceil(a));
printf("O valor %lf arredondado(baixo) eh : %lf\n", a, floor(a));
printf("\n");
printf("\n");
return 0;
}