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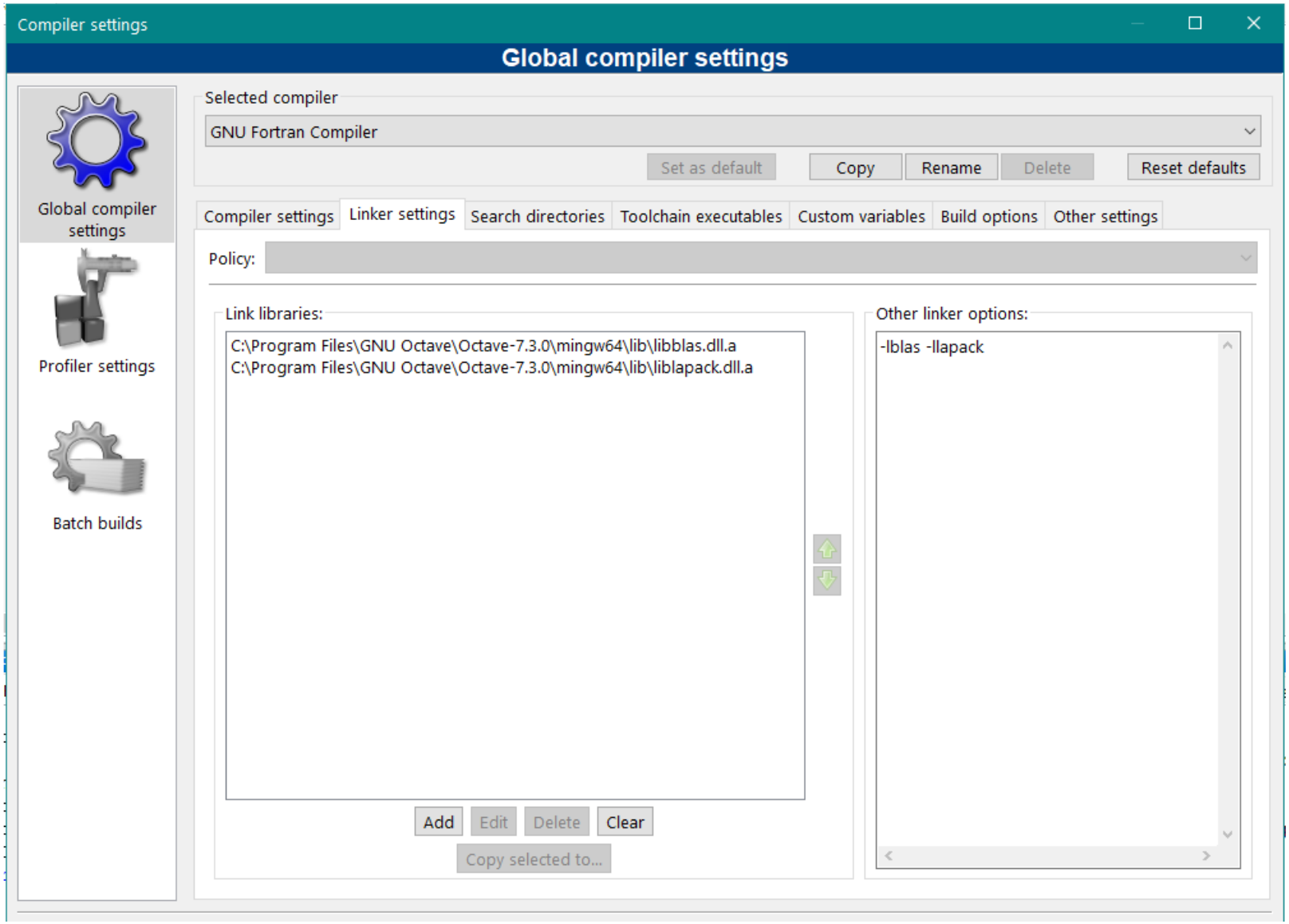
Setting up compiler, linker, and dynamically linked libraries libblas.dll.a , liblapack.dll.a. 64bit for GNU Fortran in CodeBlocks . Using installed GNU Octave 7.3.0 x64



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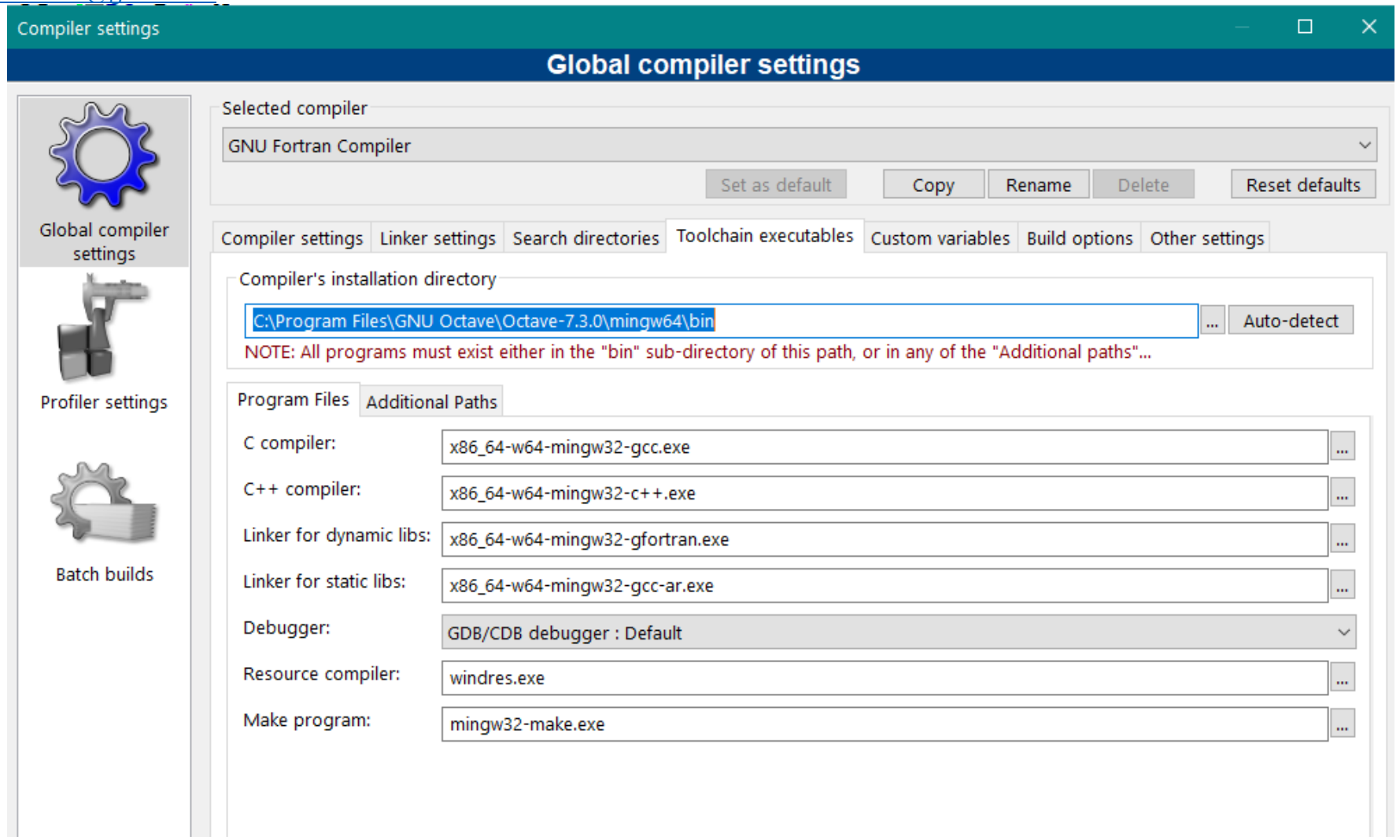

Locations of some applications:
C:\Program Files\GNU Octave\Octave-7.3.0\mingw64\bin\windres.exe

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C:\Program Files\gcc-win64\bin\ windres.exe
C:\msys64\mingw64\bin\mingw32-make.exe
C:\msys64\mingw64\bin\ mingw32-make.exe
Sample code from book : Computational Physics. Walker, Darren J.. (2016). *Computational Physics - An Introduction.* Mercury Learning and Information. Retrieved from
https://app.knovel.com/hotlink/toc/id:kpCPAI0001/computational-physics/computational-physics

CHAPTER 2 – GETTING COMFORTABLE
PiPolygon.f90

```
PROGRAM PI_POLYGON
IMPLICIT NONE
INTEGER, PARAMETER :: N = 4
INTEGER, PARAMETER :: NRHS = 1
INTEGER I, J
INTEGER INFO, IPIV(N)
DOUBLE PRECISION A(N,N), P
DOUBLE PRECISION B(N)
EXTERNAL DGESV
DO J=1,N
DO I=1,N
P = (I+2)*(J-1)
A(I,J) = 1/(2**P)
END DO
END DO
PRINT *, "Coefficient matrix A:"
DO I=1,N
WRITE(*,100) A(I,1), A(I,2), A(I,3), A(I,4)
100 FORMAT(4(" ", f10.6))
END DO
B(1) = 3.061467
B(2) = 3.121445
B(3) = 3.136548
B(4) = 3.140331
!
```

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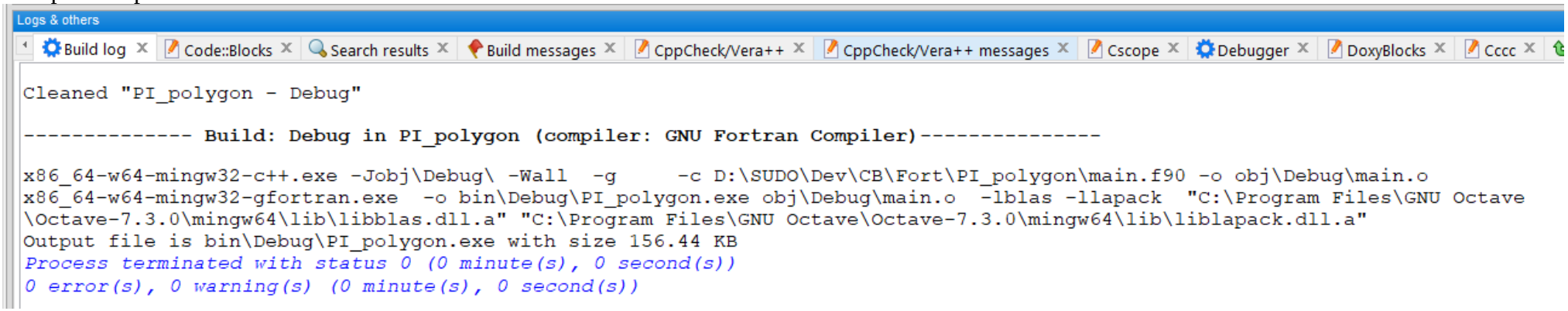
```
CALL DGESV(N, NRHS, A, N, IPIV, B, N, INFO)
PRINT *, "Display the solution x"
DO I = 1,N
WRITE(*,101) B(I)
101 FORMAT(1(" ", f10.6))
END DO
STOP
END PROGRAM PI_POLYGON
!END OF FILE********
```

Compiler output



Program output in cmd in Win10Pro x64, 22H2, installed on 15. 10. 2021, OS build 19045.2673, Windows Feature Experience Pack 120.2212.4190.0, SSD, RAM 6 GB

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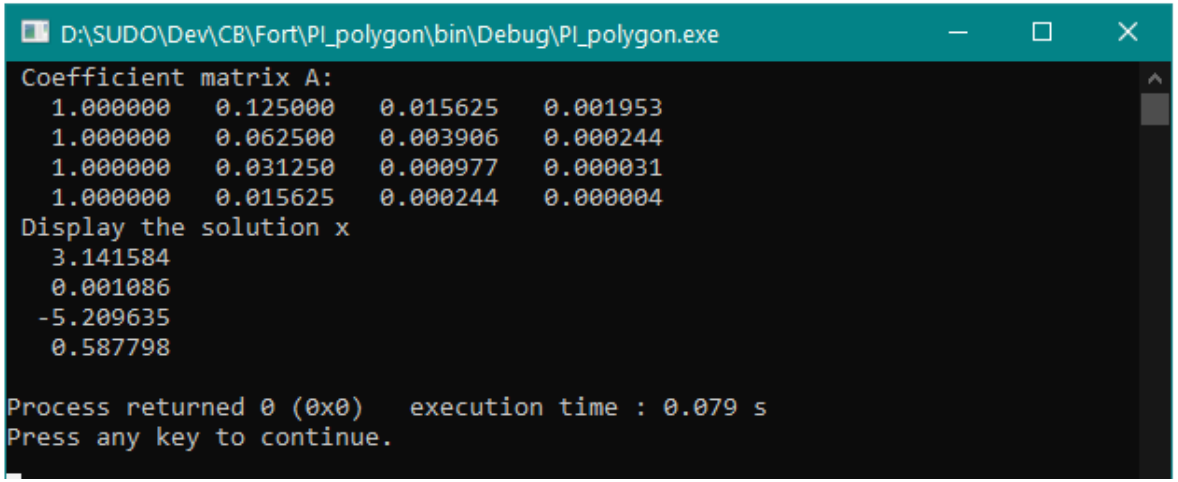

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Programming environment for GNU Fortran