

Problem 1

Command:

```
./prob1.sh 3 15
```

Output:

```
3
4
5
6
7
8
9
10
11
12
13
14
15
```

Problem 2

Command:

```
./prob2.sh /usr/bin/gdb
```

Output:

"/usr/bin/gdb" is a file.

You have the following permissions to it:

read write execute

Command:

```
./prob2.sh /usr/bin/
```

Output:

"/usr/bin/" is a directory.

You have the following permissions to it:

read write execute

Command:

```
./prob2.sh /usr/bin/gbd
```

Output:

/usr/bin/gbd is neither a regular file or directory

Problem 3

Command:

```
./prob3.sh Picture png
```

Output:

Problem 4

Command:

```
./prob4.sh Athena.txt
```

Output:

88.75

Problem 5

Command:

```
./prob5.sh MIDG.tar.gz
```

Output:

```
./_BuildMaps2d.c
```

BuildMaps2d.c

```
./_BuildMaps3d.c
```

BuildMaps3d.c

BuildMaps3d.o

```
./_F072.neu
```

F072.neu

```
./_FS_K01022.neu
```

FS_K01022.neu

```
./_FacePair2d.c
```

FacePair2d.c

```
./_FacePair3d.c
```

FacePair3d.c

FacePair3d.o

```
./_InitCPU2d.c
```

InitCPU2d.c

```
./_InitCPU3d.c
```

InitCPU3d.c

InitCPU3d.o

```
./_LoadBalance2d.c
```

LoadBalance2d.c

```
./_LoadBalance3d.c
```

LoadBalance3d.c

LoadBalance3d.o

```
./_MakefileCPU2d
```

MakefileCPU2d

```
./_MakefileCPU3d
```

MakefileCPU3d

```
./_MakefileGPU2d
```

MakefileGPU2d

```
./_MakefileGPU3d
```

MakefileGPU3d

MaxwellsCPU2d

MaxwellsCPU3d

```
./_MaxwellsDriver2d.c
```

MaxwellsDriver2d.c
./._MaxwellsDriver3d.c
MaxwellsDriver3d.c
MaxwellsDriver3d.o
./._MaxwellsKernel2d.cu
MaxwellsKernel2d.cu
./._MaxwellsKernel3d.cu
MaxwellsKernel3d.cu
./._MaxwellsMPI2d.c
MaxwellsMPI2d.c
./._MaxwellsMPI3d.c
MaxwellsMPI3d.c
MaxwellsMPI3d.o
./._MaxwellsRHS2d.c
MaxwellsRHS2d.c
./._MaxwellsRHS3d.c
MaxwellsRHS3d.c
MaxwellsRHS3d.o
./._MaxwellsRun2d.c
MaxwellsRun2d.c
./._MaxwellsRun3d.c
MaxwellsRun3d.c
MaxwellsRun3d.o
./._Mesh.h
Mesh.h
./._Mesh2d.c
Mesh2d.c
./._Mesh3d.c
Mesh3d.c
Mesh3d.o
./._ParallelPairs.c
ParallelPairs.c
ParallelPairs.o
./._Startup2d.c
Startup2d.c
./._Startup3d.c
Startup3d.c
Startup3d.o
./._Utils.c
Utils.c
Utils.o
./._block2.neu
block2.neu

./._block3.neu
block3.neu
./._buildsource.m
buildsource.m
./._cubeK268.neu
cubeK268.neu
./._data3dN01.h
data3dN01.h
./._data3dN02.h
data3dN02.h
./._data3dN03.h
data3dN03.h
./._data3dN04.h
data3dN04.h
./._data3dN05.h
data3dN05.h
./._data3dN06.h
data3dN06.h
./._data3dN07.h
data3dN07.h
./._data3dN08.h
data3dN08.h
./._data3dN09.h
data3dN09.h
./._dataN01.h
dataN01.h
./._dataN02.h
dataN02.h
./._dataN03.h
dataN03.h
./._dataN04.h
dataN04.h
./._dataN05.h
dataN05.h
./._dataN06.h
dataN06.h
./._dataN07.h
dataN07.h
./._dataN08.h
dataN08.h
./._dataN09.h
dataN09.h
./._dataN10.h

dataN10.h
./._dataN11.h
dataN11.h
./._dataN12.h
dataN12.h
./._dataN13.h
dataN13.h
./._dataN14.h
dataN14.h
./._dataN15.h
dataN15.h
./._dataN16.h
dataN16.h
./._defs.h
defs.h
./._fem.h
fem.h
libmetis.a
libparmetis.a
./._license.midg
license.midg
./._macros.h
macros.h
./._parmetis.h
parmetis.h
./._parmetisbin.h
parmetisbin.h
./._parmetislib.h
parmetislib.h
./._proto.h
proto.h
./._readme
readme
./._rename.h
rename.h
./._stdheaders.h
stdheaders.h
./._struct.h
struct.h
./._tictoc.cu
tictoc.cu
updates
mkdir: cannot create directory 'MakefileCPU2d': File exists

mv: 'MakefileCPU2d' and '/home/cong/MIDG/MakefileCPU2d' are the same file
mkdir: cannot create directory 'MakefileCPU3d': File exists
mv: 'MakefileCPU3d' and '/home/cong/MIDG/MakefileCPU3d' are the same file
mkdir: cannot create directory 'MakefileGPU2d': File exists
mv: 'MakefileGPU2d' and '/home/cong/MIDG/MakefileGPU2d' are the same file
mkdir: cannot create directory 'MakefileGPU3d': File exists
mv: 'MakefileGPU3d' and '/home/cong/MIDG/MakefileGPU3d' are the same file
mkdir: cannot create directory 'MaxwellsCPU2d': File exists
mv: 'MaxwellsCPU2d' and '/home/cong/MIDG/MaxwellsCPU2d' are the same file
mkdir: cannot create directory 'MaxwellsCPU3d': File exists
mv: 'MaxwellsCPU3d' and '/home/cong/MIDG/MaxwellsCPU3d' are the same file
mkdir: cannot create directory 'readme': File exists
mv: 'readme' and '/home/cong/MIDG/readme' are the same file
mkdir: cannot create directory 'updates': File exists
mv: 'updates' and '/home/cong/MIDG/updates' are the same file
MIDG/
MIDG/._dataN12.h
MIDG/readme
MIDG/._stdheaders.h
MIDG/._dataN04.h
MIDG/._FS_K01022.neu
MIDG/._data3dN01.h
MIDG/._MaxwellsRHS3d.c
MIDG/._MakefileGPU3d
MIDG/._data3dN07.h
MIDG/._Utils.c
MIDG/._dataN07.h
MIDG/a/
MIDG/a/libparmetis.a
MIDG/a/libmetis.a
MIDG/._license.midg
MIDG/._LoadBalance3d.c
MIDG/m/
MIDG/m/buildsource.m
MIDG/._dataN05.h
MIDG/._data3dN06.h
MIDG/._FacePair3d.c
MIDG/._BuildMaps3d.c
MIDG/._dataN01.h
MIDG/._data3dN03.h
MIDG/._dataN03.h
MIDG/._MaxwellsRHS2d.c
MIDG/._MaxwellsDriver2d.c

MIDG/h/
MIDG/h/dataN12.h
MIDG/h/rename.h
MIDG/h/stdheaders.h
MIDG/h/data3dN03.h
MIDG/h/parmetis.h
MIDG/h/macros.h
MIDG/h/data3dN02.h
MIDG/h/struct.h
MIDG/h/data3dN06.h
MIDG/h/data3dN05.h
MIDG/h/dataN04.h
MIDG/h/parmetislib.h
MIDG/h/dataN14.h
MIDG/h/dataN16.h
MIDG/h/dataN13.h
MIDG/h/defs.h
MIDG/h/dataN11.h
MIDG/h/dataN03.h
MIDG/h/data3dN07.h
MIDG/h/data3dN01.h
MIDG/h/data3dN08.h
MIDG/h/data3dN09.h
MIDG/h/dataN01.h
MIDG/h/dataN10.h
MIDG/h/dataN06.h
MIDG/h/parmetisbin.h
MIDG/h/dataN05.h
MIDG/h/fem.h
MIDG/h/Mesh.h
MIDG/h/dataN02.h
MIDG/h/dataN09.h
MIDG/h/dataN15.h
MIDG/h/proto.h
MIDG/h/data3dN04.h
MIDG/h/dataN08.h
MIDG/h/dataN07.h
MIDG/._MaxwellsRun3d.c
MIDG/._struct.h
MIDG/._Mesh2d.c
MIDG/._MaxwellsKernel2d.cu
MIDG/._dataN10.h
MIDG/._FacePair2d.c

MIDG/._MaxwellsMPI2d.c
MIDG/._readme
MIDG/._cubeK268.neu
MIDG/MaxwellsCPU3d
MIDG/._Mesh3d.c
MIDG/._MakefileGPU2d
MIDG/._buildsource.m
MIDG/._StartUp3d.c
MIDG/._Mesh.h
MIDG/._MakefileCPU2d
MIDG/c/
MIDG/c/MaxwellsMPI3d.c
MIDG/c/StartUp2d.c
MIDG/c/BuildMaps3d.c
MIDG/c/MaxwellsDriver2d.c
MIDG/c/MaxwellsMPI2d.c
MIDG/c/FacePair3d.c
MIDG/c/MaxwellsRHS3d.c
MIDG/c/BuildMaps2d.c
MIDG/c/InitCPU3d.c
MIDG/c/Utils.c
MIDG/c/LoadBalance2d.c
MIDG/c/InitCPU2d.c
MIDG/c/LoadBalance3d.c
MIDG/c/MaxwellsDriver3d.c
MIDG/c/FacePair2d.c
MIDG/c/Mesh3d.c
MIDG/c/StartUp3d.c
MIDG/c/Mesh2d.c
MIDG/c/MaxwellsRHS2d.c
MIDG/c/ParallelPairs.c
MIDG/c/MaxwellsRun3d.c
MIDG/c/MaxwellsRun2d.c
MIDG/._F072.neu
MIDG/MakefileGPU3d
MIDG/._tictoc.cu
MIDG/._dataN02.h
MIDG/._macros.h
MIDG/._dataN14.h
MIDG/._data3dN02.h
MIDG/._ParallelPairs.c
MIDG/._dataN15.h
MIDG/MakefileCPU2d

MIDG/._parmetislib.h
MIDG/._LoadBalance2d.c
MIDG/._defs.h
MIDG/._parmetisbin.h
MIDG/o/
MIDG/o/Utils.o
MIDG/o/StartUp3d.o
MIDG/o/BuildMaps3d.o
MIDG/o/FacePair3d.o
MIDG/o/ParallelPairs.o
MIDG/o/InitCPU3d.o
MIDG/o/MaxwellsRun3d.o
MIDG/o/MaxwellsMPI3d.o
MIDG/o/LoadBalance3d.o
MIDG/o/Mesh3d.o
MIDG/o/MaxwellsDriver3d.o
MIDG/o/MaxwellsRHS3d.o
MIDG/MakefileCPU3d
MIDG/neu/
MIDG/neu/block2.neu
MIDG/neu/cubeK268.neu
MIDG/neu/FS_K01022.neu
MIDG/neu/F072.neu
MIDG/neu/block3.neu
MIDG/cu/
MIDG/cu/MaxwellsKernel3d.cu
MIDG/cu/tictoc.cu
MIDG/cu/MaxwellsKernel2d.cu
MIDG/._dataN09.h
MIDG/._data3dN08.h
MIDG/._proto.h
MIDG/._dataN06.h
MIDG/._fem.h
MIDG/._dataN11.h
MIDG/MaxwellsCPU2d
MIDG/._data3dN05.h
MIDG/._dataN13.h
MIDG/._data3dN09.h
MIDG/._data3dN04.h
MIDG/midg/
MIDG/midg/license.midg
MIDG/updates
MIDG/MakefileGPU2d

MIDG/._MaxwellsKernel3d.cu
MIDG/._InitCPU2d.c
MIDG/._dataN08.h
MIDG/._BuildMaps2d.c
MIDG/._MaxwellsDriver3d.c
MIDG/._MaxwellsRun2d.c
MIDG/._MaxwellsMPI3d.c
MIDG/._block3.neu
MIDG/._MakefileCPU3d
MIDG/._InitCPU3d.c
MIDG/._parmetis.h
MIDG/._block2.neu
MIDG/._dataN16.h
MIDG/._rename.h
MIDG/._StartUp2d.c