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Note: We have used indentation as a main tool to show in which function we are entering and from where we are going back. While on the main places we have used “back to \*” keyword to show. (Where we thought it is important)

Main

DEBUG(“t”, “Entering the main”)

DebugIsEnabled(flag)

(back to main)

Initialize(argc,argv)

DebugInit(debugArgs)

Statistics()

Interrupt()

List()

Scheduler()

List()

(Back to main)

ThreadTest()

ThreadTest1()

DEBUG('t', "Entering ThreadTest1")

DebugIsEnabled(flag)

Thread(“forked thread”)

Fork()

DEBUG('t', "Forking thread \"%s\" with func = 0x%x, arg = %d\n",name, (int) func, arg)

DebugIsEnabled(flag)

StackAllocate(func,arg)

AllocBoundedArray(StackSize \* sizeof(int))

SetLevel(InfOff)

ChangeLevel(old,now)

DEBUG('i',"\tinterrupts: %s -> %s\n",intLevelNames[old],intLevelNames[now])

DebugIsEnabled(flag)

ReadytoRun(this)

DEBUG('t', "Putting thread %s on ready list.\n", thread->getName())

DebugIsEnabled(flag)

setStatus(READY)

Append((void \*)thread)

ListElement(item, 0)

IsEmpty()

SetLevel(oldLevel)

ChangeLevel(old,now)

DEBUG('i',"\tinterrupts: %s -> %s\n",intLevelNames[old],intLevelNames[now])

DebugIsEnabled(flag)

OneTick()

DEBUG('i', "\n== Tick %d ==\n", stats->totalTicks)

DebugIsEnabled(flag)

ChangeLevel(IntOn, IntOff)

DEBUG('i',"\tinterrupts: %s -> %s\n",intLevelNames[old],intLevelNames[now])

DebugIsEnabled(flag)

CheckIfDue(False)

DebugisEnabled(‘I’)

SortedRemove(&when)

IsEmpty()

ChangeLevel(IntOff, IntOn)

DEBUG('i',"\tinterrupts: %s -> %s\n",intLevelNames[old],intLevelNames[now])

DebugIsEnabled(flag)

(back to ThreadTest1())

SimpleThread(0)

Yield()

ChangeLevel(old,now)

DEBUG('i',"\tinterrupts: %s -> %s\n",intLevelNames[old],intLevelNames[now])

DebugIsEnabled(flag)

getName()

FindNextToRun ()

Remove()

SortedRemove(NULL)

IsEmpty()

ReadyToRun()

getname()

DEBUG('t', "Putting thread %s on ready list.\n", thread->getName())

DebugIsEnabled(flag)

setStatus(READY)

Append((void \*)thread)

ListElement(item, 0)

IsEmpty()

(back to Yield())

Run(nextThread)

CheckOverflow()

setStatus(RUNNING)

getName()

DEBUG('t', "Switching from thread \"%s\" to thread \"%s\"\n",

oldThread->getName(), nextThread->getName()

DebugIsEnabled(flag)

getName()

DEBUG('t', "Now in thread \"%s\"\n", currentThread->getName())

DebugIsEnabled(flag)

(back to Yield)

SetLevel(level)

ChangeLevel(old,now)

DEBUG('i',"\tinterrupts: %s -> %s\n",intLevelNames[old],intLevelNames[now])

DebugIsEnabled(flag)

OneTick()

DEBUG('i', "\n== Tick %d ==\n", stats->totalTicks)

DebugIsEnabled(flag)

ChangeLevel(IntOn, IntOff)

DEBUG('i',"\tinterrupts: %s -> %s\n",intLevelNames[old],intLevelNames[now])

DebugIsEnabled(flag)

CheckIfDue(False)

DebugisEnabled(‘I’)

SortedRemove(&when)

IsEmpty()

ChangeLevel(IntOff, IntOn)

DEBUG('i',"\tinterrupts: %s -> %s\n",intLevelNames[old],intLevelNames[now])

DebugIsEnabled(flag)

(back to yield)

(back to SimpleThread)

(Yield will run 5 times due to for loop)

(back to ThreadTest1)

(back to ThreadTest)

(back to main)

Finish()

SetLevel(IntOff)

ChangeLevel(old,now)

DEBUG('i',"\tinterrupts: %s -> %s\n",intLevelNames[old],intLevelNames[now])

DebugIsEnabled(flag)

(back to Finish)

getName()

DEBUG('t', "Finishing thread \"%s\"\n", getName())

DebugIsEnabled(flag)

Sleep()

getLevel()

getName()

DEBUG('t', "Sleeping thread \"%s\"\n", getName())

DebugIsEnabled(flag)

FindNextToRun ()

Remove()

SortedRemove(NULL)

IsEmpty()

Run(nextThread)

CheckOverflow()

setStatus(RUNNING)

getName()

DEBUG('t', "Switching from thread \"%s\" to thread \"%s\"\n",

oldThread->getName(), nextThread->getName()

DebugIsEnabled(flag)

getName()

DEBUG('t', "Now in thread \"%s\"\n", currentThread->getName())

DebugIsEnabled(flag)

(back to Run)

(back to Sleep)

(back to Finish)

(back to main)