INSTITUTO POLITÉCNICO NACIONAL

UNIDAD PROFESIONAL
INTERDISCIPLINARIA EN INGENIERÍA Y
TECNOLOGÍAS AVANZADAS

UPIITA

Simulación en C-

SISTEMAS OPERATIVOS EN TIEMPO REAL

3MV9

ALUMNO:

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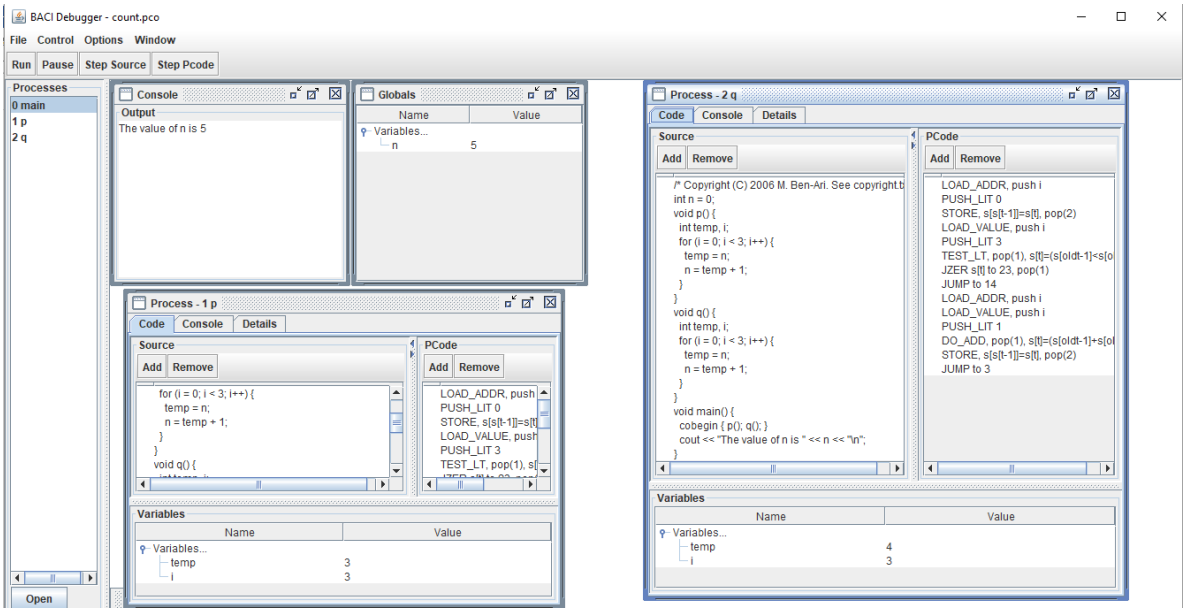
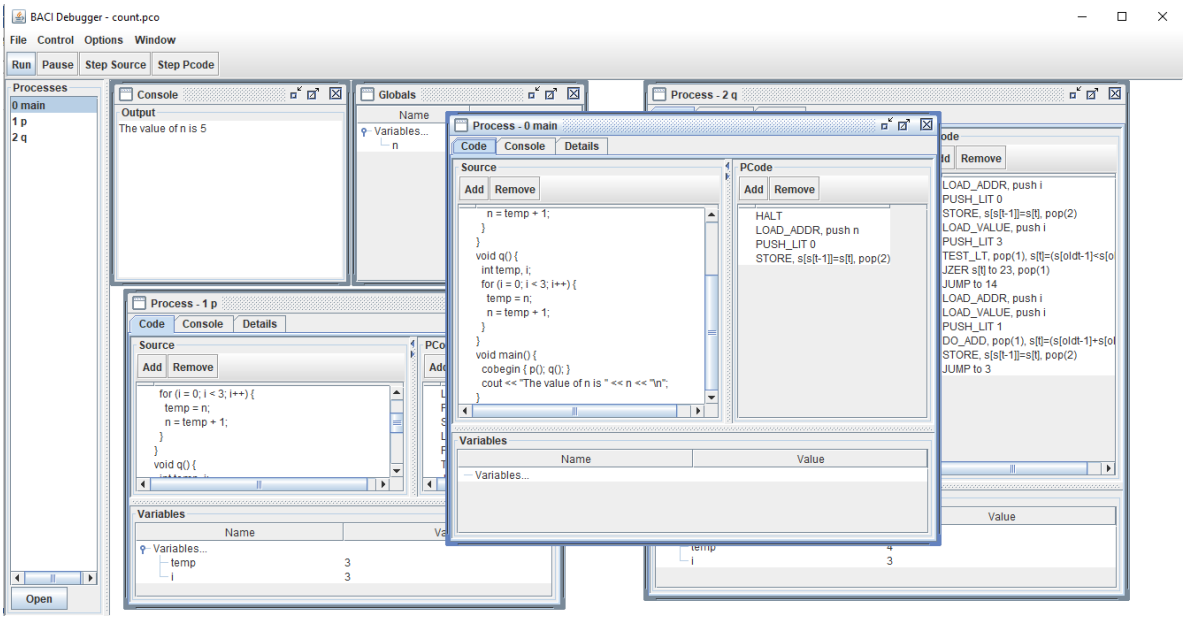
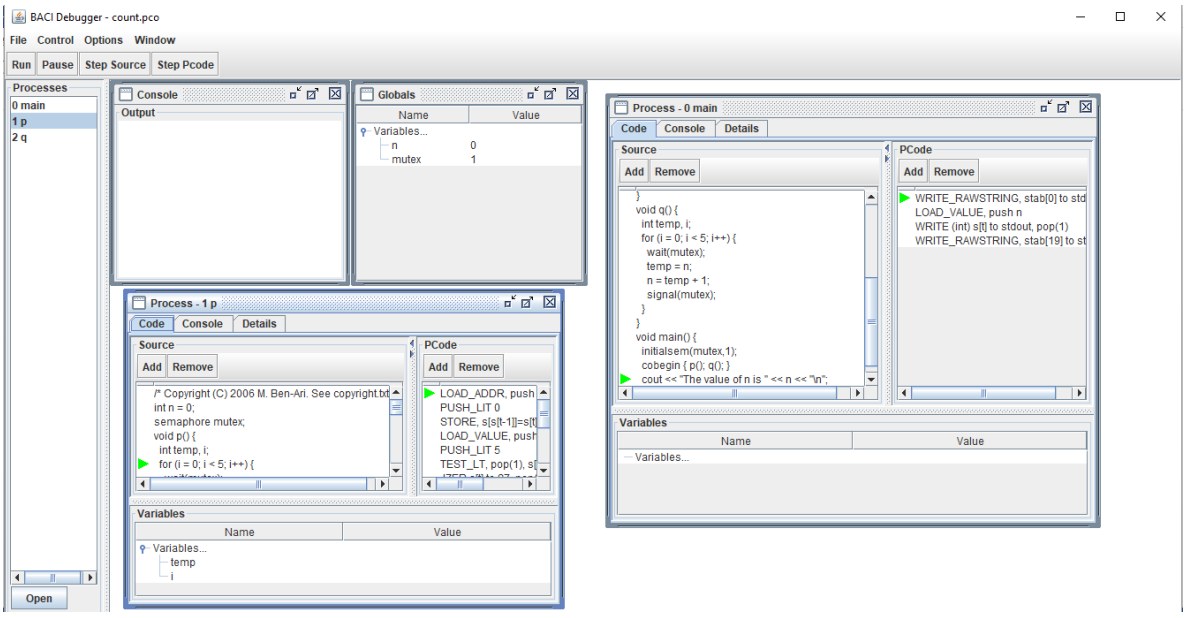
2014640223

Count

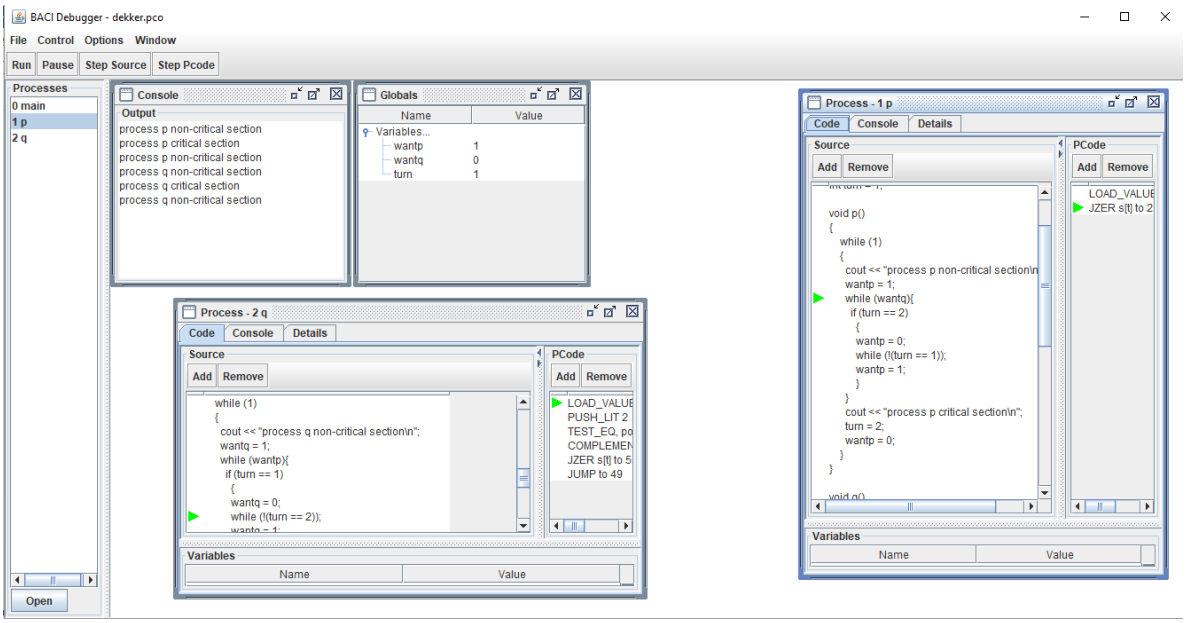

BACI Debugger - count.pco
File Control Options Window
Run Pause Step Source Step Pcode
Processes
0 main
1 p
2 q
Open
Console
Output
The value of n is 5
Globals
Name Value
Variables...
n 5
Process - 1 p
Code Console Details
Source
Add Remove
for (i = 0; i < 3; i++) {
temp = n;
n = temp + 1;
}
}
void q() {
PCode
Add Remove
LOAD_ADDR, push
PUSH_LIT 0
STORE, s[s[t-1]]=s[t]
LOAD_VALUE, push
PUSH_LIT 3
TEST_LT, pop(1), s
Variables
Name Value
Variables...
temp 3
i 3
Process - 2 q
Code Console Details
Source
Add Remove
/* Copyright (C) 2006 M. Ben-Ari. See copyright.t
int n = 0;
void p() {
int temp, i;
for (i = 0; i < 3; i++) {
temp = n;
n = temp + 1;
}
}
void q() {
int temp, i;
for (i = 0; i < 3; i++) {
temp = n;
n = temp + 1;
}
}
void main() {
cobegin { p(); q(); }
cout << "The value of n is " << n << "\n";
}
PCode
Add Remove
LOAD_ADDR, push i
PUSH_LIT 0
STORE, s[s[t-1]]=s[t], pop(2)
LOAD_VALUE, push i
PUSH_LIT 3
TEST_LT, pop(1), s[t]=(s[oldt-1]<s[o
JZER s[t] to 23, pop(1)
JUMP to 14
LOAD_ADDR, push i
LOAD_VALUE, push i
PUSH_LIT 1
DO_ADD, pop(1), s[t]=(s[oldt-1]+s[o
STORE, s[s[t-1]]=s[t], pop(2)
JUMP to 3
Variables
Name Value
Variables...
temp 4
i 3


BACI Debugger - count.pco
File Control Options Window
Run Pause Step Source Step Pcode
Processes
0 main
1 p
2 q
Open
Console
Output
The value of n is 5
Globals
Name
Variables...
n
Process - 0 main
Code Console Details
Source
Add Remove
n = temp + 1;
}
}
void q() {
int temp, i;
for (i = 0; i < 3; i++) {
temp = n;
n = temp + 1;
}
}
void main() {
cobegin { p(); q(); }
cout << "The value of n is " << n << "\n";
}
PCode
Add Remove
HALT
LOAD_ADDR, push n
PUSH_LIT 0
STORE, s[s[t-1]]=s[t], pop(2)
Variables
Name Value
Variables...
Process - 1 p
Code Console Details
Source
Add Remove
for (i = 0; i < 3; i++) {
temp = n;
n = temp + 1;
}
}
void q() {
Variables
Name
Variables...
temp 3
i 3
Process - 2 q
Remove
LOAD_ADDR, push i
PUSH_LIT 0
STORE, s[s[t-1]]=s[t], pop(2)
LOAD_VALUE, push i
PUSH_LIT 3
TEST_LT, pop(1), s[t]=(s[oldt-1]<s[o
JZER s[t] to 23, pop(1)
JUMP to 14
LOAD_ADDR, push i
LOAD_VALUE, push i
PUSH_LIT 1
DO_ADD, pop(1), s[t]=(s[oldt-1]+s[o
STORE, s[s[t-1]]=s[t], pop(2)
JUMP to 3
Value
temp 4
i 3

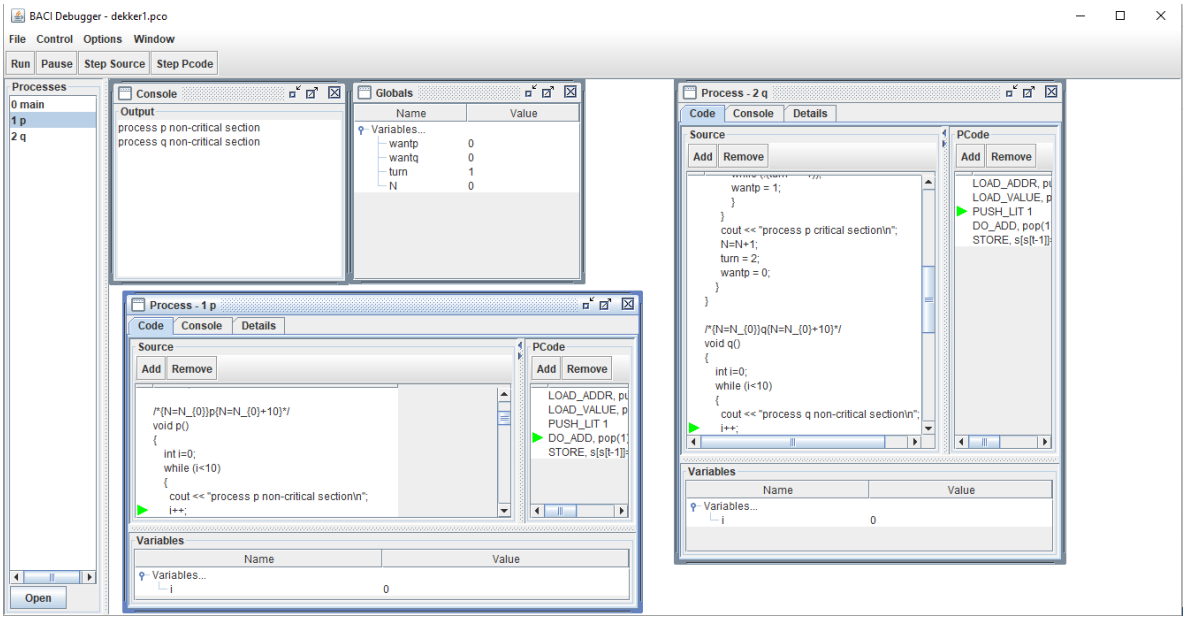
Count 1



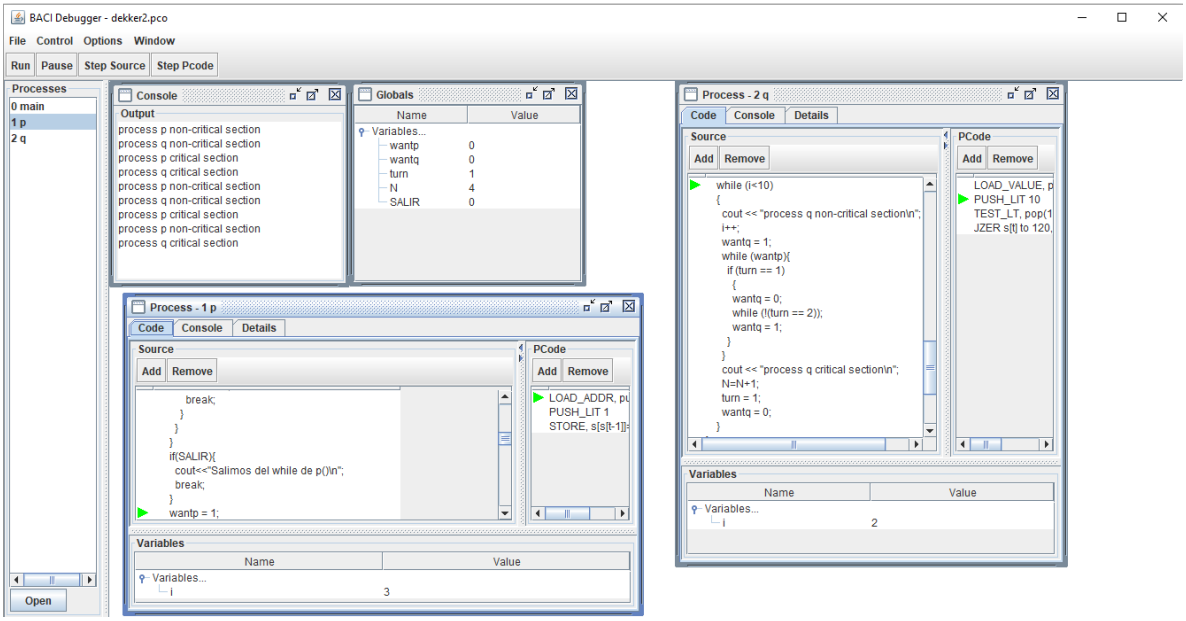
Deckker



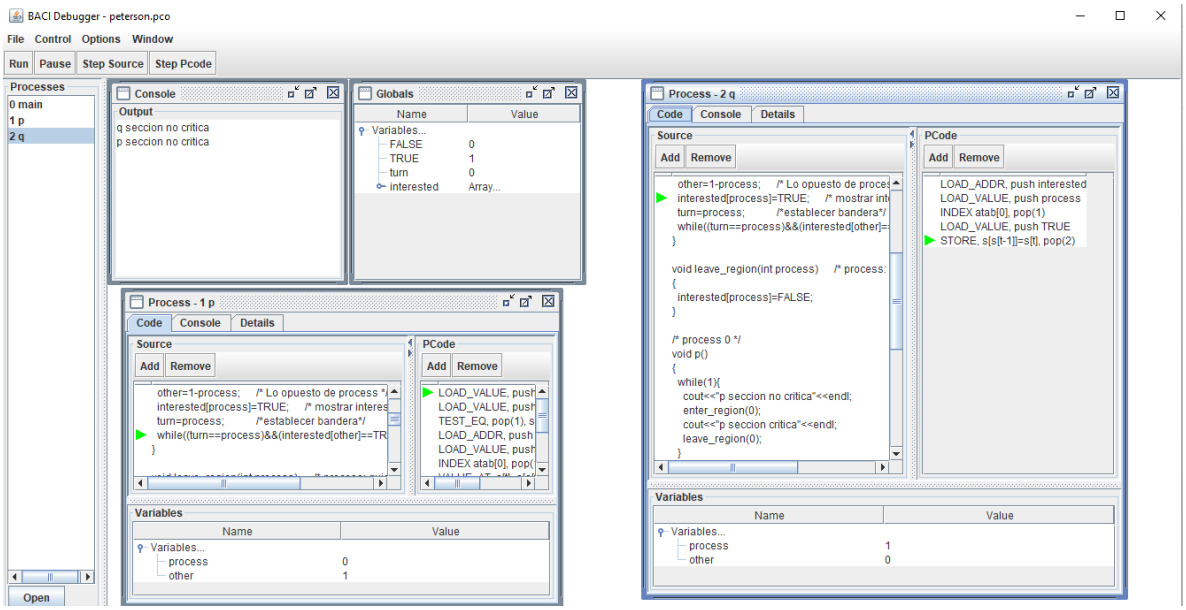
Deckker 1



Deckker 2



Peterson


BACI Debugger - peterson.pco
File Control Options Window
Run Pause Step Source Step Pcode
Processes
0 main
1 p
2 q
Open
Console
Output
q seccion no critica
p seccion no critica
Globals
Name
Value
Variables...
FALSE 0
TRUE 1
turn 0
interested Array...
Process - 1 p
Code Console Details
Source
Add Remove
other=1-process; /* Lo opuesto de process */
interested[process]=TRUE; /* mostrar interes
turn=process; /*establecer bandera*/
while((turn==process)&&(interested[other]==TR
}
PCode
Add Remove
LOAD_VALUE, push
LOAD_VALUE, push
TEST_EQ, pop(1), s
LOAD_ADDR, push
LOAD_VALUE, push
INDEX atab[0], pop(
Variables
Name
Value
Variables...
process 0
other 1
Process - 2 q
Code Console Details
Source
Add Remove
other=1-process; /* Lo opuesto de proces
interested[process]=TRUE; /* mostrar int
turn=process; /*establecer bandera*/
while((turn==process)&&(interested[other]==
}
void leave_region(int process) /* process:
{
interested[process]=FALSE;
}
/* process 0 */
void p()
{
while(1){
cout<<"p seccion no critica"<<endl;
enter_region(0);
cout<<"p seccion critica"<<endl;
leave_region(0);
}
PCode
Add Remove
LOAD_ADDR, push interested
LOAD_VALUE, push process
INDEX atab[0], pop(1)
LOAD_VALUE, push TRUE
STORE, s[s[t-1]]=s[t], pop(2)
Variables
Name
Value
Variables...
process 1
other 0