I -> for id1 in id2
 	
S
 	
do I
	{ id1.pos = BuscaPos(id1.nom);
	id2.pos = BuscaPos(id2.nom);
	If (BuscaTipo(id2.nom) != tvector(tentero) yyerror("id2 no es array");
	I.nelem = Busca_NumElementos(id2.nom)
	I.cont = CrearVarTemp(); I.temp = CrearVarTemp();
	emite(I.cont ':= 0');
	
	I.inicio = SIGINST ;
	I.fin = CreaLans(SIGINST) ; emite('if' I.cont '>=' I.nelem goto --)
	emite(I.temp ':=' I.cont '*' TallaEntero);
	emite(id1.pos ':=' id2.pos '[' I.temp']');
	
	emite(I.cont ':=' I.cont '+' S.incr);
	emite('goto' I.inicio);
	CompletaLans(I.fin,SIGINST);

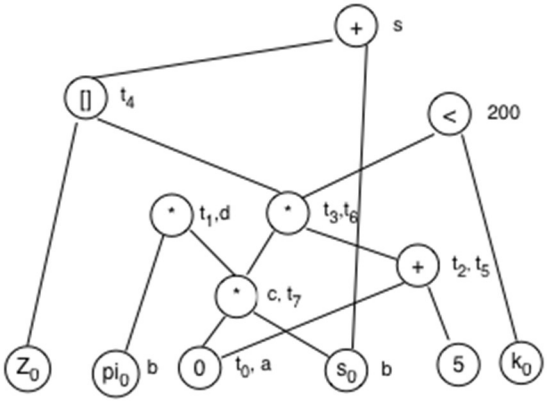
S -> step E	S.incr := E.pos
S -> epsilon	S.incr := CrearVarTemp(); emite (S.incr ':=' 1);

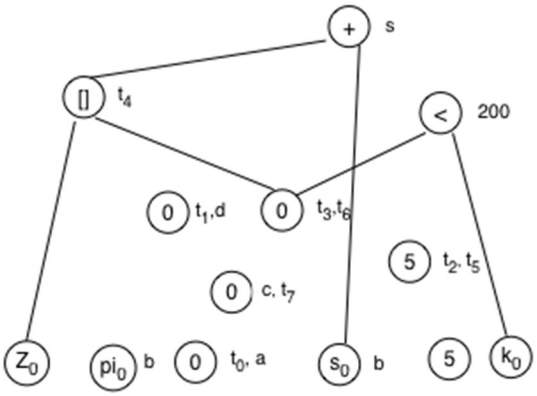
Otra alternativa:

I -> for id1 in id2
 	
S
 	
do I
	{ id1.pos = BuscaPos(id1.nom);
	id2.pos = BuscaPos(id2.nom);
	If (BuscaTipo(id2.nom) != tvector(tentero) yyerror("id2 no es array");
	I.nelem = Busca_NumElementos(id2.nom)
	S.cont = CrearVarTemp(); I.temp = CrearVarTemp();
	emite(S.cont ':= 0');
	emite(goto SIGINST '+' 2);
	I.inicio = SIGINST ;
	
	I.fin = CreaLans(SIGINST); emite('if' S.cont '>=' I.nelem goto --)
	emite(I.temp ':=' S.cont '*' TallaEntero);
	emite(id1.pos ':=' id2.pos '[' I.temp']');
	
	emite('goto' I.inicio);
	CompletaLans(I.fin,SIGINST);

S -> step E	emite(S.cont ':=' S.cont '+' E.pos);
S -> epsilon	emite(S.cont ':=' S.cont '+' 1);

4.-

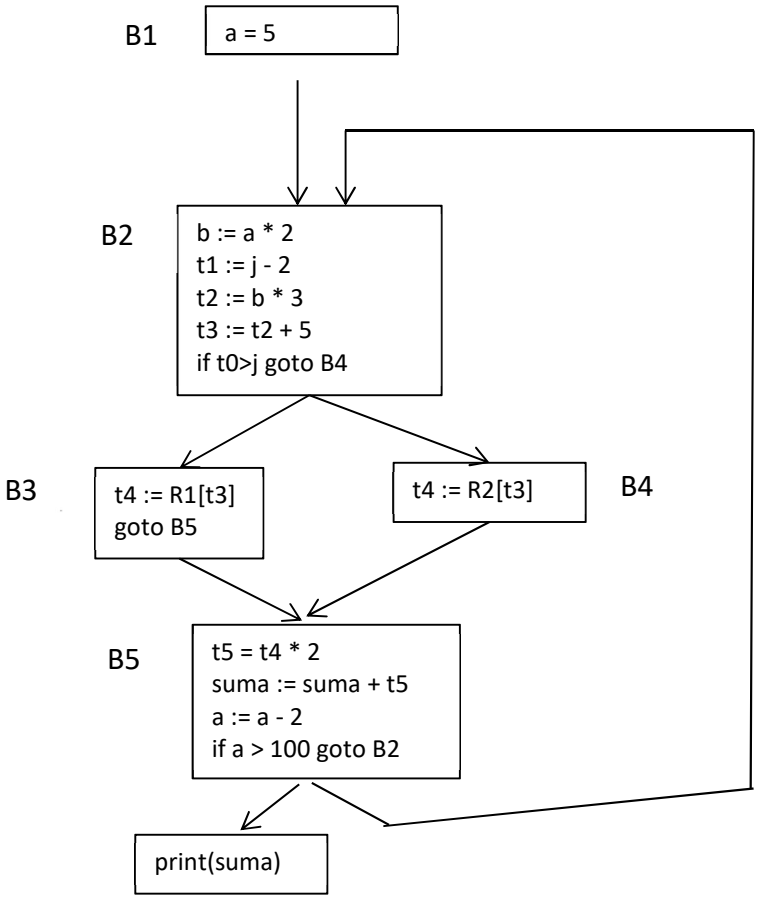




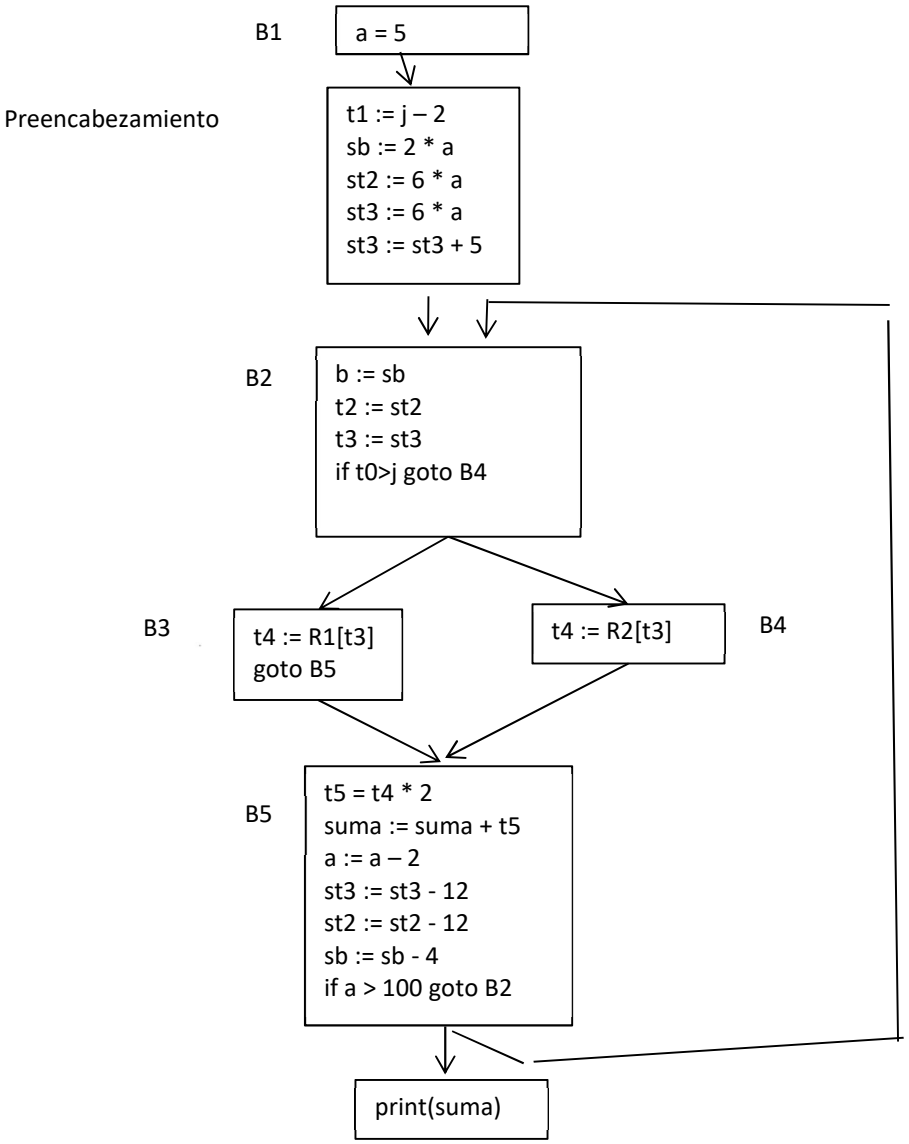
t4 := Z[0]
s := s + t4
if (0 < k) goto 200

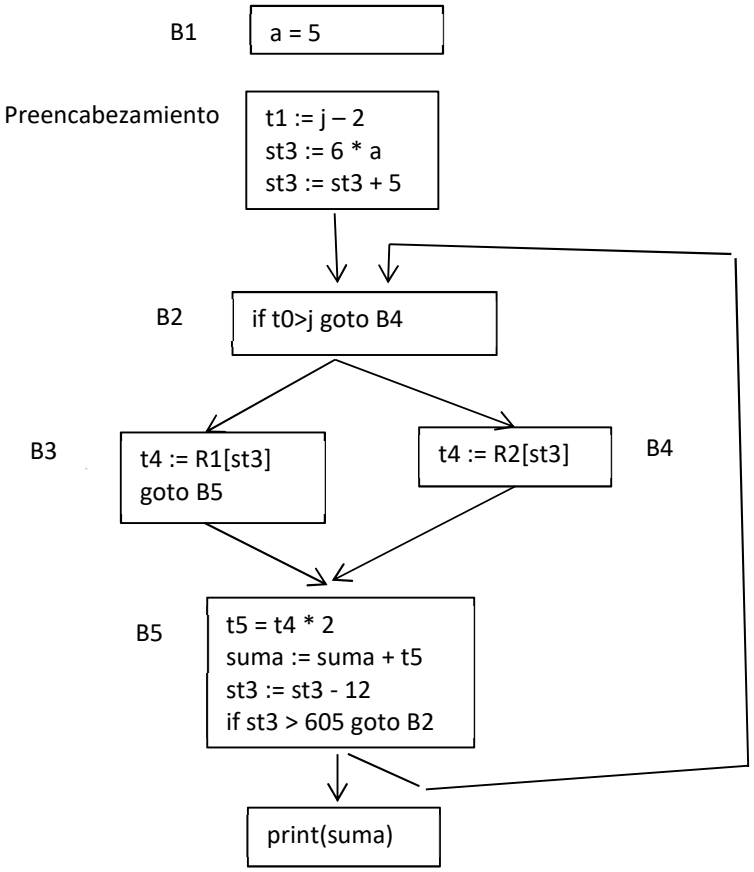
5.-

(101 a = 5
(102) b := a * 2
(103) t1 := j - 2
(104) t2 := b * 3
(105) t3 := t2 + 5
(106) if t0>j goto 109
(107) t4 := R1[t3]
(108) goto 110
(109) t4 := R2[t3]
(110) t5 = t4 * 2
(111) suma := suma + t5
(112) a := a-2
(113) if a > 100 goto 102
(114) print (suma)



Arista de retroceso: B5->B2
Bucle natural: B2, B3, B4 y B5
Código invariante: t1:= j - 2
Variables de Inducción: a (a,1,0) ; b (a,2,0); t2 (a,6,0); t3 (a,6,5)


B1
a = 5
Preencabezamiento
t1 := j – 2
sb := 2 * a
st2 := 6 * a
st3 := 6 * a
st3 := st3 + 5
B2
b := sb
t2 := st2
t3 := st3
if t0>j goto B4
B3
t4 := R1[t3]
goto B5
t4 := R2[t3]
B4
B5
t5 = t4 * 2
suma := suma + t5
a := a – 2
st3 := st3 - 12
st2 := st2 - 12
sb := sb - 4
if a > 100 goto B2
print(suma)


B1
a = 5
Preencabezamiento
t1 := j – 2
st3 := 6 * a
st3 := st3 + 5
B2
if t0>j goto B4
B3
t4 := R1[st3]
goto B5
t4 := R2[st3]
B4
B5
t5 = t4 * 2
suma := suma + t5
st3 := st3 - 12
if st3 > 605 goto B2
print(suma)