7.1.d

$$y_1 = a + b$$
$$y_2 = -y_1$$
$$y_3 = c + d$$
$$y_4 = y_2 * y_3$$
$$y_5 = a + b$$
$$y_6 = y_5 + c$$
$$y_7 = y_4 + y_6$$

7.2.c

```
loop:  if  i<=10  goto  next
           goto   label
next:      a[i] = 0
           goto   loop
 label     ret
```

7.5

图 7.5 计算被声明名字的类型和相对地址

$P \to \{ P.i = D.i = 0 \}\ D\ ;\ S$

$D \to \{ D_1.i = D.i \}\ D_1\ ;\ \{ D_2.i = D_1.i \}\ D_2$

$D \to id : T\ \{ enter(id.lexeme, T.type, D.i)\ ;\ D.i\ += T.width \}$

$T \to integer\ \{ T.type = integer\ ;\ T.width = 4 \}$

$T \to real\ \{ T.type = real\ ;\ T.width = 8 \}$

$T \to array\ [num]\ of\ T_1\ \{ T.type = array(num.val, T_1.type)\ ;$
$\qquad\qquad\qquad T.width = num.val \times T_1.width \}$

$T \to \uparrow T_1\ \{ T.type = pointer(T_1.type)\ ;\ T.width = 4\ ; \}$