

```

procedure add(a, a1, b, b1, c, c1);
value b, b1, c, c1;
real a, b, c;
integer a1, b1, c1;
begin
  comment a:=add(b,c);
  real local a, x, y;
  integer local a1, x1, y1;
  comment
    pa1      pa2 pa3 pa4 pa5 pa6 pa7 pa8 pa9 pa10;
code local a,local a1, b, b1, c, c1, x, x1, y, y1;
3, 45;
3, 44;
3, 45;
3, 44;
3, 45;
3, 44;
3, 45;
3, 44;
3, 45;
3, 44;
3, 45;
3, 44;
z1 1
pm pa6      ,gm pa8      ; x1:=c1;
pm pa4      ,gm pa10     ; y1:=b1;
arnf pa5 X IZB      ; RF:=c;
gm pa7      ,ga re10    ; loc[x]:=c
arnf pa3 X IZA      ; RF:=b;
gm pa9      ,ga re1     ; x
ps (re1)
sr (re10)D ITB      ; Raddr:=expb-expc
mt -1 D NTB      ; if expb<expc then Raddr:=Raddr*(-1)
ar 68 D ITA      ; Raddr:=Raddr+68; TA:=abs(expb-expc)>68
ga re1      ; e1[0-9]:= -abs(expb-expc)+68
hv re3 X NTB      ; if expb>expc then begin
arnf pa5 X      ; RF:=c;
ga r1
ps 0
pm pa7      ,arn pa9     ; swap(x,y);
gm pa9      ,gr pa7
pm pa8      ,arn pa10    ; swap(x1,y1);
gm pa10     ,gr pa8
e3:
arn pa7      ,pm pa8     ; M:=x1; R:=x;
qq V NTA
tln -39 V NZC
e1: t1 0 NZC t-68 ; shift to same exponent
gr pa7 X
ar pa10     ,t1 -39     ; M:=x1+y1
ar pa9      ,ar pa7     ; R:=mente+y+x
nl re2      ,t1 -10    ; normalize float.
gr pa1
e2: arn s0 D NZ t10 ; if result≠0 then calculate exponent
ga pa1 V NO ; if exp>=512^exp<512 then set exponent in local a
grn pa1 XV LT ; else if exp<0 then local a:=M:=0
hv 0 LO ; if exp>511 then alarm(⟨spill⟩)
gm pa2      , hv re20   ; UV1:=M; goto RS
e10: qq ; c47
e11: qq ; c54
e20: e;
a := local a;
a1 := local a1
end add;

```