```c
25          switch(swap)
26          {
27            case 0: valDAC = 2048; break;
28            case 1: valDAC = 4096 - valADC; break;
29            case 2: valDAC = 2048; break;
30            case 3: valDAC = valADC; swap = 0; break;
31          }
32
33          if(swap){
34            valDAC = 4096 - valADC;
35          } else{
36            valDAC = 2048;
37          }
38
39          DAC0->DAT->DATL = DAC_DATL_DATA0((valDAC))  ;    //Set DAC Output
40          DAC0->DAT->DATH = DAC_DATH_DATA1((valDAC >> 8)  &0x0F)  ;    //Set DAC Output
41
42          swap = !swap;
43
```