

```

void printOutIEEEResults(void)
{
    /* prints the first 10 values of R transferred in IEEE floating point format by the SR830 */

    int i;

    printf("\n\n");
    for (i=0;i<10;i++)
        printf("%d  %e\n",i,rfBuf[i]);          /* this is simple since the values are already IEEE floats */
}

void printOutLIAResults(void)
{
    /* calculates the first 10 values of R transferred in LIA float format by the SR830 */

    int i,mant,exp;
    int *ptr;
    float val;

    printf("\n\n");
    ptr =(int *) rfBuf;    /* ptr points to integers in rfBuf, not floats! */

    for (i=0;i<10;i++) {
        mant = *ptr++;          /* first comes the mantissa (16 bits) */
        exp = *ptr++ - 124;     /* then the binary exponent (16 bits) offset by 124 */
        val = (float) mant * (float) pow(2.0,(double) exp);
        printf("%d  %e\n",i,val);
    }
}

void initGpib(char *devName)
{
    if ((lia=ibfind(devName))<0) {
        printf("\nCannot Find SR830 \n\a");
        exit(1);
    }
}

void txLia(char *str)
{
    char serPol;

    ibwrt(lia,str,strlen(str));
    do {
        ibrsp(lia,&serPol); /* now poll for IFC RDY */
    } while ((serPol&2)==0); /* until the command finishes executing */
}

void setupLia(void)
{
    txLia("**RST"); /* initialize the lock-in */
}

```