

```

/*****/
/*                                     */
/* FILE      :sbrk.c                   */
/* DATE      :Sun, Sep 18, 2005       */
/* DESCRIPTION :Program of sbrk        */
/* CPU TYPE   :H8/3694F               */
/*                                     */
/* This file is generated by Renesas Project Generator (Ver.3.0). */
/*                                     */
/*****/

#include <stdio.h>
#include "sbrk.h"

//const size_t _sbrk_size=          /* Specifies the minimum unit of      */
                                   /* the defined heap area          */

static union {
    long dummy ; /* Dummy for 4-byte boundary */
    char heap[HEAPSIZE]; /* Declaration of the area managed */
                       /* by sbrk */
}heap_area ;

static char *brk=(char *)&heap_area; /* End address of area assigned */

/*****/
/* sbrk:Data write */
/*                                     */
/* Return value:Start address of the assigned area (Pass) */
/* -1 (Failure) */
/*****/
char *sbrk(size_t size) /* Assigned area size */
{
    char *p;

    if(brk+size>heap_area.heap+HEAPSIZE) /* Empty area size */
        return (char *) -1 ;

    p=brk ; /* Area assignment */
    brk += size ; /* End address update */
    return p ;
}

```