

```
#include <stdio.h>
#include <stdlib.h>
#include <string.h>

void main()
{
    char String1[100],String2[100];

    printf("Enter a string: ");
    scanf("%s",String1);
    String2[0] = '-';
    String2[1] = '>';
    strcpy(String2+2,String1);
    printf("The original: %s\n",String1);
    printf("The copy: %s\n",String2);
}
```

```
#include <stdio.h>
#include <stdlib.h>
#include <string.h>

void main()
{
    char String1[100],String2[100];

    printf("Enter a string: ");
    scanf("%s",String1);
    String2[0] = '-';
    String2[1] = '>';
    strcpy(String2+2,String1);
    strcat(String2,"<-");
    printf("The original: %s\n",String1);
    printf("The copy: %s\n",String2);
}
```

```
#include <stdio.h>
#include <stdlib.h>
#include <string.h>

void main()
{
    char String1[100],String2[100];

    printf("Enter a string: ");
    scanf("%s",String1);
    strcpy(String2,String1+2);
    printf("The original: %s\n",String1);
    printf("The copy: %s\n",String2);
}
```

```
#include <stdio.h>
#include <stdlib.h>
#include <string.h>

void main()
{
    char String1[100],String2[100];

    printf("Enter a string: ");
    scanf("%s",String1);

    strncpy(String2,String1+2,3);
    String2[3] = '\0';

    printf("The original: %s\n",String1);
    printf("The copy: %s\n",String2);
}
```

```
#include <stdio.h>
#include <stdlib.h>
#include <string.h>

void main()
{
    char String1[100];
    int Val;

    printf("Enter a string: ");
    scanf("%s",String1);

    Val = atoi(String1);

    printf("The numeric value of \"%s\" is %d\n",String1,Val);
}
```

```
#include <stdio.h>
#include <stdlib.h>
#include <string.h>

void main()
{
    char String1[100];
    int Val,Len;

    printf("Enter a number: ");
    scanf("%d",&Val);

    sprintf(String1,"%d",Val);

    Len = strlen(String1);

    printf("The number you entered has %d digits, not counting leading zeros.\n",Len);
}
```

```
#include <stdio.h>
#include <stdlib.h>
#include <string.h>

void main()
{
    char String1[100];
    int Val,Len;

    printf("Enter a number: ");
    scanf("%d",&Val);

    sprintf(String1,"%d",Val);

    Len = strlen(String1);

    printf("The number you entered has %d digits.\n",Len);

    sprintf(String1,"%x",Val);

    Len = strlen(String1);

    printf("The number you entered has %d digits(%x).\n",Len,Val);
}
```

```

#include <stdio.h>
#include <stdlib.h>
#include <string.h>
#include <ctype.h>

void main()
{
    char String1[100];
    int i;

    printf("Enter some text: ");
    gets(String1);
    for (i=0 ; String1[i] ; i++)
    {
        if (isalnum(String1[i]))
        {
            printf("Character %d is alphanumeric\n",i);
        }
        if (isalpha(String1[i]))
        {
            printf("Character %d is alphabetic\n",i);
        }
        if (__isascii(String1[i]))
        {
            printf("Character %d is legal ascii\n",i);
        }
        if (iscntrl(String1[i]))
        {
            printf("Character %d is a control character\n",i);
        }
        if (__iscsym(String1[i]))
        {
            printf("Character %d is legal in a C variable name\n",i);
        }
        if (__iscsymf(String1[i]))
        {
            printf("Character %d is legal as first characer of C variable\n",i);
        }
        if (isdigit(String1[i]))
        {
            printf("Character %d is a digit\n",i);
        }
        if (isgraph(String1[i]))
        {
            printf("Character %d is graphical character\n",i);
        }
        if (islower(String1[i]))
        {
            printf("Character %d is lower case\n",i);
        }
        if (isprint(String1[i]))
        {
            printf("Character %d is printable\n",i);
        }
        if (ispunct(String1[i]))
        {
            printf("Character %d is punctuation\n",i);
        }
        if (isspace(String1[i]))
        {
            printf("Character %d is white space\n",i);
        }
        if (isupper(String1[i]))
        {
            printf("Character %d is upper case\n",i);
        }
        if (isxdigit(String1[i]))
        {
            printf("Character %d is a hexadecimal digit\n",i);
        }
    }
}

```

```

#include <stdio.h>
#include <stdlib.h>
#include <string.h>

void main()
{
    char String1[100],String2[100];
    char *String3;

    /* Concatenate String2 to the end of String1 */
    strcat(String1,String2);

    /* Compare String1 and String2 */
    strcmp(String1,String2) == 0

    /* find first occurrence of 'a' in String 1 */
    /* Returns char * */
    String3 = strchr(String1,'a');

    /* Copy String1 to String2 */
    strcpy(String2,String1);

    /* find the first occurrence of a, b or c in String1 */
    /* Returns integer position */
    strcspn(String1,"abc");

    /* Compares String1 and String2 without regard to case */
    _stricmp(String1,String2)

    /* Find the length of String1 */
    strlen(String1);

    /* Convert String1 to lower case */
    _strlwr(String1);

    /* Find the first occurrence of a, b, or c in String1 */
    /* returns a char * */
    strpbrk(String1,"abc");

    /* Finds the last occurrence of 'a' in String1 */
    strrchr(String1,'a');

    /* Reverses String1 */
    _strrev(String1)

    /* Sets all characters of String1 to 'a' */
    /* Length determined by '\0' character */
    _strset(String1,'a');

    /* Find the first character in String1 that is NOT equal to a, b, or c. */
    /* Returns an integer */
    strspn(String1,"abc");

    /* find the first occurrence of the string "abc" in String1 */
    /* returns a char * */
    strstr(String1,"abc");

    /* break String1 apart using spaces for delimiters */
    /* see help (or man) for full details. */
    strtok(String1," ");

    /* Convert String1 to upper case */
    _strupr(String1);

    /* FIXED LENGTH STRING FUNCTIONS (ignores '\0')*/
    /* Same as strcat 3-characters copied */
    strncat(String2,String1,3);

    /* Same as strcmp 4-characters compared */
    strncmp(String1,String2,4);

    /* Same as strcpy 2-characters copied */

```

```
strncpy(String2,String1,2);
```

```
/* Same as strcmp, 6-characters compared */  
_strnicmp(String1,String2,6);
```

```
/* Same as _strset, 8-characters initialized. Stops when '\0' found */  
_strnset(String1,'a',8);
```

```
}
```

```
#include <stdio.h>
#include <stdlib.h>

void main()
{
    /* Zero all but 7 low-order bits */
    Integer = _toascii(Integer);

    /* Convert to lower case, if input is upper case */
    Integer = tolower(Integer);

    /* Convert to lower case without testing */
    Integer = _tolower(Integer);

    /* Convert to upper case, if input is lower case */
    Integer = toupper(Integer);

    /* Convert to upper case without testing */
    Integer = _toupper(Integer);
}
```