10 July

**C Program to find the first non-repeating character in a string.**

#include<stdlib.h>

#include<stdio.h>

#define NO\_OF\_CHARS 256

int \*get\_char\_count(char \*str)

{

int \*count = (int \*)calloc(sizeof(int), NO\_OF\_CHARS);

int i;

for (i = 0; \*(str+i); i++)

count[\*(str+i)]++;

return count;

}

int first\_non\_repeating\_character(char \*str)

{

int \*count = get\_char\_count(str);

int index = -1, i;

for (i = 0; \*(str+i); i++)

{

if (count[\*(str+i)] == 1)

{

index = i;

break;

}

}

free(count);

return index;

}

int main()

{

char str[NO\_OF\_CHARS];

printf("\nEnter the string : ");

scanf("%s",&str);

int index = first\_non\_repeating\_character(str);

if (index == -1)

printf("All the characters are repetitive");

else

printf("First non-repeating character is %c", str[index]);

getchar();

return 0;

}