

MIPS Functions Exercise

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The following C function will return the number of occurrences of the character `c` in the string `s`:

```
int strcnt(char *s, char c)
{
    int count = 0;

    while (*s != '\0')
    {
        if (*s == c)
            ++count;

        ++s;
    }

    return count;
}
```

Write MIPS assembly corresponding to this function. Your assembly code should push and pop a frame for the function. Assume that `s` is passed through `$a0` and stored in `$s0`, `c` is passed through `$a1` and stored in `$s1`, `count` is kept in `$s2`, and `$s3` is used to hold the current character from `s`. `Count` is returned through `$v0`. Use this for your frame map:

\$fp
\$ra
\$s0
\$s1
\$s2
\$s3

E-mail your solution, in ASCII text form, to kelliher@bluebird.goucher.edu by 5:00 PM on the 25th.