

# CSCI 135 Software Design and Analysis, C++

## Lab 9

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### Lab A: Split

Write a function called `split` that has the following signature:

```
char * split(const char * s, char * t, bool b) {  
    .  
    .  
    .  
  
    return t;  
}
```

If `b` is true, it copies all even numbered characters in `s` to `t`. Otherwise, it copies all odd numbered characters in `s` to `t`. For example, if `s` is “hello”, `split(s,t,true)` will make `t` “hlo”, and `split(s,t,false)` will make `t` “el”. Assume `t` is long enough and don’t forget to append the null character in both cases.

### Lab B: Merge

Write a function called `merge` that has the following signature:

```
char * merge(const char * s1, const char * s2, char *t) {  
    .  
    .  
    .  
  
    return t;  
}
```

This function merges `s1` and `s2` into `t` starting with `s1`. For example, if `s1` is “hello” and `s2` is “abcdefg”, then `t` will be “haeblcldoefg”. Assume `t` is long enough and don’t forget the null character. Also, make sure that

```
merge(split(s,t1,true), split(s,t2,false), t);
```

makes `t` a copy of `s`.