

Problem 2

Consider the C program below. (For space reasons, we are not checking error return codes, so assume that all functions return normally.)

```
int main () {
    if (fork() == 0) {
        if (fork() == 0) {
            printf("3");
        }
        else {
            pid_t pid; int status;
            if ((pid = wait(&status)) > 0) {
                printf("4");
            }
        }
    }
    else {
        printf("2");
        exit(0);
    }
    printf("0");
    return 0;
}
```

For each of the following strings, circle whether (Y) or not (N) this string is a possible output of the program.

- | | | |
|----------|---|---|
| a. 32040 | Y | N |
| b. 34002 | Y | N |
| c. 30402 | Y | N |
| d. 23040 | Y | N |
| e. 40302 | Y | N |