

Problem 53. (5 points):

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

```
main() {  
  
    if (fork() == 0) {  
        if (fork() == 0) {  
            printf("3");  
        }  
        else {  
            pid_t pid; int status;  
            if ((pid = wait(&status)) > 0) {  
                printf("4");  
            }  
        }  
    }  
    else {  
        if (fork() == 0) {  
            printf("1");  
            exit(0);  
        }  
        printf("2");  
    }  
  
    printf("0");  
  
    return 0;  
}
```

Out of the 5 outputs listed below, circle only the valid outputs of this program. Assume that all processes run to normal completion.

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|------------|------------|------------|
| A. 2030401 | B. 1234000 | C. 2300140 |
| D. 2034012 | E. 3200410 | |