```
[] G & Share
                                                                                             Output
       main.c
                                                                                            Enter process number (0 to 4):
     32 }
R
      33
      34 - int main() {
              calc_need();
      35
              int p,req[R];
      36
5
      37
              printf("Enter process number (0 to 4): ");
              scanf("%d",&p);
      38
       39
              printf("Enter resource request (e.g., 0 1 0): ");
       40
              for(int i=0;i<R;i++) scanf("%d",&req[i]);</pre>
      41
0
               // Check request <= need and request <= avail
      42
       43 -
              for(int i=0;i<R;i++){</pre>
0
                   if(req[i]>need[p][i]) { printf("Error: exceeds need\n"); return 0; }
       44
      45
                  if(req[i]>avail[i]) { printf("Resources not available\n"); return 0; }
      46
0
              // Try allocation
      47
      48 -
              for(int i=0;i<R;i++){</pre>
JS
                  avail[i]-=req[i]; alloc[p][i]+=req[i]; need[p][i]-=req[i];
      49
       50
TS
      51
               if(is_safe()) printf("Request granted. System is in safe state.\n");
              else { printf("Request denied. System is not in safe state.\n"); }
      52
=
      53
              return 0;
      54 }
```