```
int main(void)
   char *reminders[MAX_REMIND];
   char day_str[3], msg_str[MSG_LEN+1];
   int day, i, j, num_remind = 0;
   for (;;) {
     if (num_remind == MAX REMIND) {
       printf("-- No space left --\n");
       break;
     printf("Enter day and reminder: ");
     scanf("%2d", &day);
     if (day == 0)
      break;
     sprintf(day_str, "%2d", day);
    read_line(msg_str, MSG_LEN);
    for (i = 0; i < num_remind; i++)
      if (strcmp(day_str, reminders[i]) < 0)</pre>
        break;
    for (j = num remind; j > i; j--)
      reminders[j] = reminders[j-1];
    reminders[i] = malloc(2 + strlen(msg_str) + 1);
    if (reminders[i] == NULL) {
      printf("-- No space left --\n");
      break;
    }
    strcpy(reminders[i], day_str);
    strcat(reminders[i], msg_str);
    num_remind++;
  printf("\nDay Reminder\n");
  for (i = 0; i < num remind; i++)
    printf(" %s\n", reminders[i]);
  return 0;
int read_line(char str[], int n)
  int ch, i = 0;
 while ((ch = getchar()) != ' n')
   if (i < n)
      str[i++] = ch;
 str[i] = ' \setminus 0';
 return i;
```