```
ORG 100H
.MODEL SMALL
.STACK 100H
.DATA
 buffer DB 100 dup('$')
 todo_text1 DB 100 dup('$')
 todo text2 DB 100 dup('$')
 todo date1 DB 100 dup('$')
 todo date2 DB 100 dup('$')
 taskAdded DB 0
msg_header DB "
                                       ",0DH, 0AH
    DB "|___| || || || ",0DH, 0AH
    DB" || __ __ || _| \ / | __ || _ _ ",0DH, 0AH
    DB" | | / _ ` | / _ | | | / | \\ | | / _ ` | | _ | / _ \",0DH, 0AH
    DB" | || (_| |\__\| < | | | || (_| || |_ __/",0DH, 0AH
    DB" |_|\__,||___/||\\|| |_|\__,|\__|\_,|\ODH, OAH
    DB "
                             ",0DH, 0AH
                             ",0DH, 0AH
    DB "
    DB "", 0DH, 0AH
      DB "
           [1] Show all tasks", ODH, OAH
      DB "
           [2] Add new task", 0DH, 0AH
      DB" [3] Update a task", 0DH, 0AH
      DB" [4] Delete a task", ODH, OAH
      DB [5] Search a task", ODH, OAH
      DB " [0] Exit", 0DH, 0AH
      DB "", 0DH, 0AH
      DB "Press any of the given digit to continue...$"
 msg show all DB "***************************, 0DH, 0AH
       DB "*
                               *", 0DH, 0AH
       DB "*
               All of your TASKS
                                 *", 0DH, 0AH
                         *", 0DH, 0AH
       DB "*********, ODH, OAH
       DB "", 0DH, 0AH
       DB "$"
 UPDATE task *", 0DH, *", 0DH, 0AH
       DB "*
                                 *", 0DH, 0AH
       DB "*
       DB "*********, ODH, OAH
       DB "", 0DH, 0AH
       DB "$"
```

```
DB "*
                         *", 0DH, 0AH
     DB "*
                            *", 0DH, 0AH
              ADD NEW task
     DB "*
                   *", 0DH, 0AH
     DB "**********, ODH, OAH
     DB "", 0DH, 0AH
     DB "$"
 DB "**********, ODH, OAH
     DB "", 0DH, 0AH
     DB "$"
 msg updating header DB "*********************************, ODH,
0AH
     DB "*
                         *", 0DH, 0AH
     DB "* Updating a task *", 0DH

R "* *", 0DH, 0AH
                            *", 0DH, 0AH
     DB "**********, 0DH, 0AH
     DB "", 0DH, 0AH
     0AH
                         *", 0DH, 0AH
     DB "*
     DB "* SEARCH A TASK
                              *", 0DH, 0AH
                    *", 0DH, 0AH
     DB "*********, ODH, OAH
     DB "", 0DH, 0AH
     DB "$"
 msg_text DB "Enter Task description : $"
 msg_date DB "Enter Task date(DD/MM/YYYY): $"
 msg_added DB "Task added successfully...$"
 msg_delete DB " DELETE functionality goes here
 msg_empty DB "No task found$"
 msg_update DB "Enter the SL No of the task you want to UPDATE$"
 msg_option DB "[1] Main Menu
                       [0] Exit$"
 msg_back DB "OR Press [0] to back$"
 msg_no_match DB "No matching task found.$"
 msg_match_found DB "Matching Task Found:$"
 msg_search_prompt DB "Enter to search$", 0
 newline DB 13, 10, "$"
```

```
.CODE
MAIN PROC
 MOV AX, @DATA
 MOV DS, AX
 MAINMENU_LOOP:
   CLEAR_SCREEN
   SHOW_HEADER
   INPUT_LOOP:
   GETC
   CMP AL, '1'
   JE SM1
   CMP AL, '2'
   JE SM2
   CMP AL, '3'
   JE SM3
   CMP AL, '4'
   JE SM4
   CMP AL, '5'
   JE SM5
   CMP AL, '0'
   JE END_MAIN
   JMP INPUT_LOOP
 SM1:
   CALL SHOW_ALL_TASKS
   JMP MAINMENU_LOOP
 SM2:
   CALL ADD_NEW_TASK
   JMP MAINMENU_LOOP
 SM3:
   CALL UPDATE_TASK
   JMP MAINMENU_LOOP
```

```
SM4:
   CALL DELETE_TASK
   JMP MAINMENU_LOOP
 SM5:
   CALL SEARCH TASK
   JMP MAINMENU_LOOP
 END_MAIN:
   EXIT
MAIN ENDP
SHOW_ENTERED_TASKS PROC
   SHOW newline
   CMP taskAdded, 0
   JE EMPTY
   SHOW_TASK "1", todo_text1, todo_date1
   CMP taskAdded, 2
   JGE SECOND_TASK_OUTPUT
     JMP CONT1
   EMPTY:
   SHOW msg_empty
   JMP CONT1
   SECOND_TASK_OUTPUT:
   SHOW newline
   SHOW newline
   SHOW_TASK "2", todo_text2, todo_date2
   JMP CONT1
   ; Point From EMPTY block
   CONT1:
   RET
   SHOW_ENTERED_TASKS ENDP
ADD_NEW_TASK PROC
 CLEAR_SCREEN
 SHOW msg_add_header
 SHOW newline
 SHOW msg_text
```

```
MOV BL, taskAdded
 CMP BL, 1
 JE SECOND TASK
   GET_STRING todo_text1
   SHOW newline
   SHOW msg date
   GET_STRING todo_date1
   JMP CONT
 SECOND TASK:
   GET_STRING todo_text2
   SHOW newline
   SHOW msg_date
   GET_STRING todo_date2
   CALL SORT
 CONT:
 INC taskAdded
 SHOW newline
 SHOW newline
 SHOW msg_added
 SHOW newline
 SHOW newline
 SHOW msg option
 SHOW newline
 GETC
 RET
 ADD_NEW_TASK ENDP
       DB "********* "ODH, OAH
       DB "*
              All remaining procedures such as *", 0DH, 0AH Update Task,Delete Task,Search Task *", 0DH, 0AH
       DB "********, ODH, OAH
       DB "", 0DH, 0AH
       DB "$"
 RET
SWAP_TODO ENDP
END MAIN
```