DESCRIPTION

- ## INTRODUCTION

  This project is on phonebook. The project provides features like password protection, view contact, delete contact, edit contact, speed-dial, calling, etc. the additional feature is taking a backup of all your contact into file which can be used on your smartphone.

- ## FUNCTION CALLS AND PROCEDURES

1. GRAPHICS MODE.

```
grapmode  proc            ;for graphic mode
mov al,13h
mov ah,00
int 10h
ret
endp
```

2. CREATE CONTACT.

```
cr_file: call grapmode
   lea dx, msg2            ; module for creating a file
   call disp1
   call read1              ; read name of file to be
   lea dx, buffer1[2]      ; created
   mov cx, 0
   mov ah, 3ch             ; create the file
   int 21h
   mov handle,ax           ; push file handle onto stack.
writex: lea dx, msg28      ; ask if data is to
```

```
        call disp1
        mov bx,handle           ; retrieve file handle from stack.
        mov buffer1[1], 0
write : call readch             ; read data character by character.
        cmp al,40h
        jnc writex
        mov buffer1[0], al
        cmp buffer1[0], 27      ; check if character is 'Esc'(stop).
        jz no
        cmp buffer1[0], 0dh
        jne neol
        lea dx, msg31
        call disp1
        mov si, dx
        mov byte ptr ds:[si + 2], 0
        mov cx, 3
        jmp com

neol :  mov cx, 1
        lea dx, buffer1[0]
com :   mov ah, 40h             ; write to the file
        int 21h
        mov byte ptr ds:[si + 2], '$'
        jmp write
no :    mov bx,handle
        mov AH,3Eh
        int 21h
```

```
        lea dx, msg16           ; creation successful
        call disp1
        mov bl,02
        call delay
        jmp begin
```

3. VIEW CONTACT.

```
vw_file:lea dx, msg5        ; module to view the
        call disp1          ; contents of a file
        lea dx, buffer1[2]
        call disp1
        lea dx, msg6    ;Number: string
        call disp1
        lea dx, buffer1[2]
        mov al, 02h     ;read/write mode
        mov ah, 3dh     ; open the existing file
        int 21h

        mov buffer2[0], 0
        cmp ax, 2           ; error if file not found
        jnz v_err
        lea dx, msg14
        call disp1
        jmp endv

v_err:  cmp ax, 3           ; error if path not found
        jnz cont2
```

```
        lea dx, msg21
        call disp1
        mov flag,1
        jmp endv

cont2:  mov handle, ax
        mov bx, handle          ;file handle
        mov cx, 1               ;no of byte to read
        lea dx, buffer1
        mov ah, 3fh             ; read the file
        int 21h
        cmp ax, 0               ; stop if end-of-file
        jz endv
        cmp buffer1[0], 0dh
        jnz show
        inc buffer2[0]
        cmp buffer2[0], 23      ; check if end of page
        jnz show
        lea dx, msg26
        call disp1
show : mov buffer1[1], '$'
        lea dx, buffer1
        call disp1
        mov ax, handle
        jmp cont2
end :
```

```
jay:    cmp flag,0
        jne jj2
        jmp calling
jj2:    jmp optn2
```

4. EDIT CONTACT.

```
ed_file:call grapmode
        lea dx, buffer1[2]      ; created
        mov cx, 0
        mov ah, 3ch             ; create the file
        int 21h
        mov handle, ax                  ; push file handle onto stack.
writex2:lea dx, msg28           ; ask if data is to
        call disp1
        mov bx, handle                          ; retrieve file handle from stack.
        mov buffer1[1], 0
write2 :call readch             ; read data character by character.
        cmp al,40h
        jnc writex2
        mov buffer1[0], al
        cmp buffer1[0], 27      ; check if character is 'Esc'(stop).
        jz no2
        cmp buffer1[0], 0dh
        jne neol2
        lea dx, msg31
        call disp1
```

```
        mov si, dx
        mov byte ptr ds:[si + 2], 0
        mov cx, 3
        jmp com2

neol2 :mov cx, 1
        lea dx, buffer1[0]

com2 :mov ah, 40h               ; write to the file
        int 21h
        mov byte ptr ds:[si + 2], '$'
        jmp write2

no2 :mov bx,handle
        mov AH,3Eh
        int 21h
        lea dx, msg16           ; creation successful
        call disp1
        mov bl,02
        call delay
        jmp begin
```

5. DELETE CONTACT.

```
dl_file:call grapmode
        lea dx, buffer1[2]
        mov ah, 41h             ; delete the file
        int 21h
        cmp ax, 2               ; error if file not found
        jnz err2
        lea dx, msg14
        call disp1
        jmp endd
err2 :  cmp ax, 5               ; error if access denied
        jnz done
        lea dx, msg15
        call disp1
        jmp endd
done :  lea dx, msg17           ; delete successful
        call disp1
endd :  mov bl,02
        call delay
        jmp begin
```

6. CREATE BUTTON.

```
        mov cx,0bh     ;column
        mov dx,0b0h    ;row
        mov al,0fh              ;button colour(white)
        mov ah,0ch     ;change colour for single pixel
 sna:   int 10h
```

```
inc cx
cmp cx,4ah
jne sna
inc dx
mov cx,0Bh
cmp dx,0c2h
jne sna
```

7. STRING ON BUTTON.

```
 mov ax,data
mov es,ax
mov al,01h              ;string write mode with attr.
mov bh,0h               ;page no
mov bl, 0fh         ;colour
mov cx,06h          ;string length
mov dl,2h               ; 1Bh+4h=20h=32d 32d/8d=4pixel
mov dh,17h
mov bp,offset but1
mov ah,13h      ;display string with attr. in graphical mode
int 10h
```

8. MOUSE CLICK.

```
again: mov ax,0000h
int 33h
cmp ax,0000h
je again            ;End Mouse initialization....
```

```
                    ;show initialized mouse pointer
        mov ax, 0001h
        int 33h         ;endsssssssss show initialized mouse pointer
                    ;check for button click.....
check:  mov fileno,0h
        mov ax,0003h
        int 33h
        cmp bx,1h               ;any button pressed
        jne check
        shr cx,01h
        cmp cx,0Bh      ;greater than or equal 0B we want!!!!
        jc che1
        cmp cx,4ah      ;less than 4A!!!!
        jnc che1
        cmp dx,0b0h     ;greater than or equal 0B0 we want!!!!
        jc che1
        cmp dx,0c3h     ;less than C3!!!!
        jnc che1
        jmp cr_file             ;jump to create
```

9. DISPLAY STRING ON SCREEN.

```
 disp1 proc
 mov ah, 09h   ; module for display of
  int 21h              ; a string on screen
  ret
 disp1 endp
```

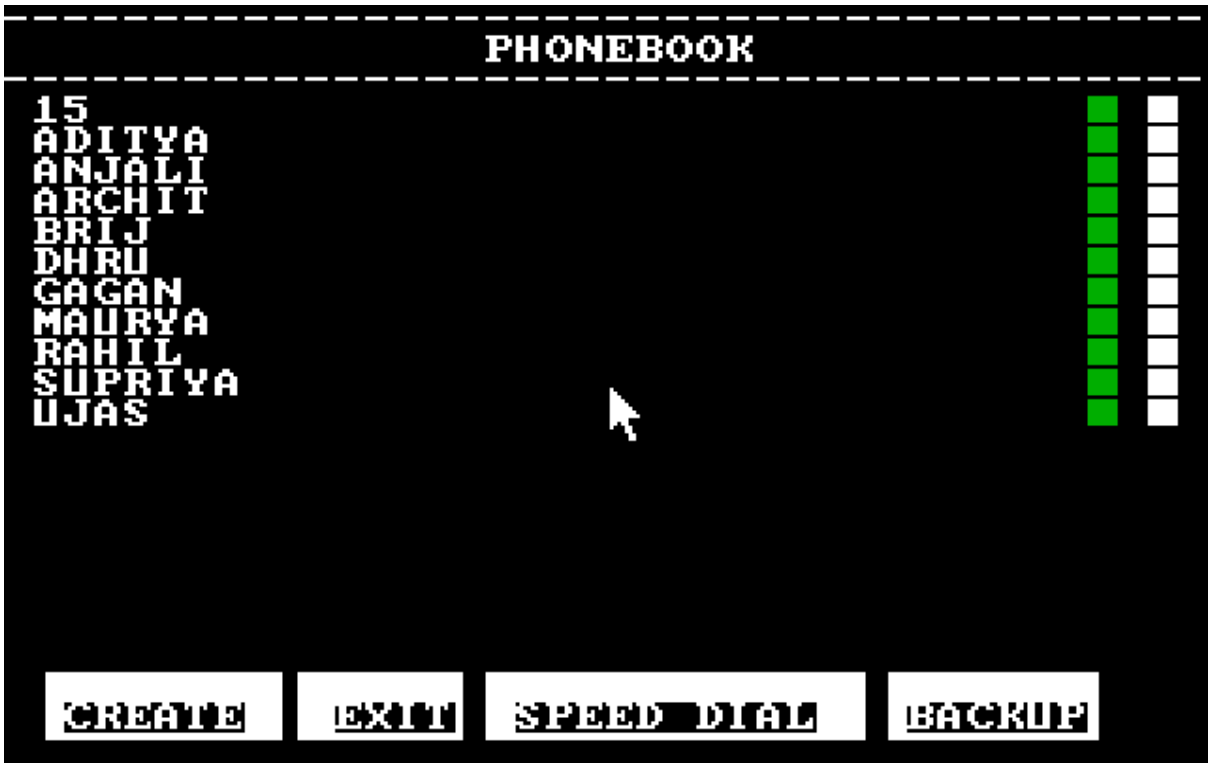
10.READING STRING FROM KEYBOARD.

```
read1 proc                    ; module for reading
 mov buffer1[0], 80
 mov buffer1[1],0
 lea dx, buffer1
 mov ah, 0ah   ; read string from keyboard
 int 21h
 mov bl, buffer1[1]
 mov bh, 0
 add bx, 2
 mov buffer1[bx], 0    ; ASCIIZ string, so
 ret                ; terminate with 0
 read1 endp
```

SCREENSHOTS

- **PASSWORD PROTECTION**

- **HOME PAGE**

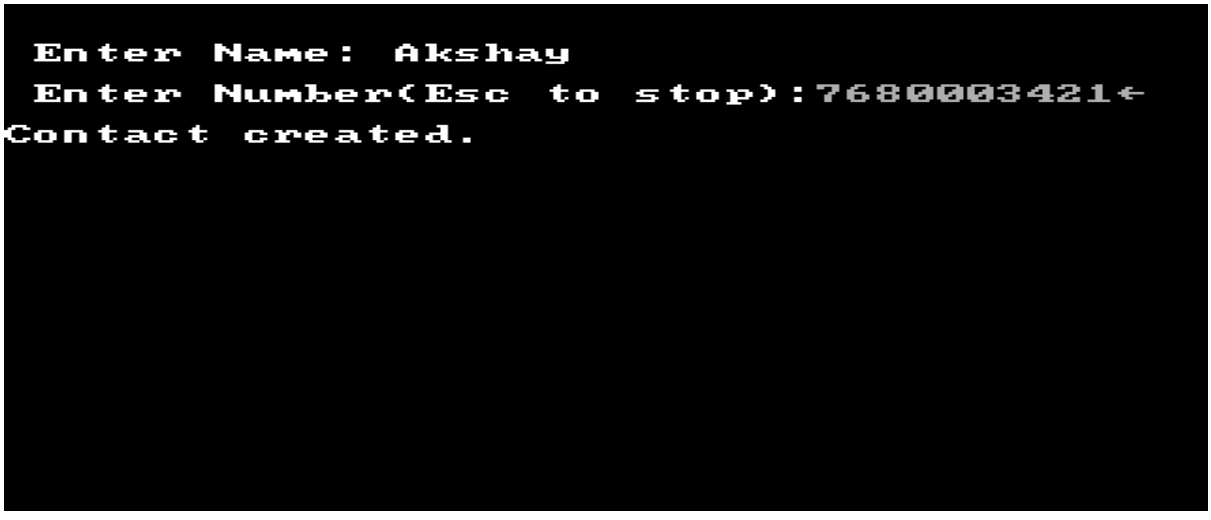


- **EDIT CONTACT**

(ORIGINAL CONTACT)

(EDITTED CONTACT)

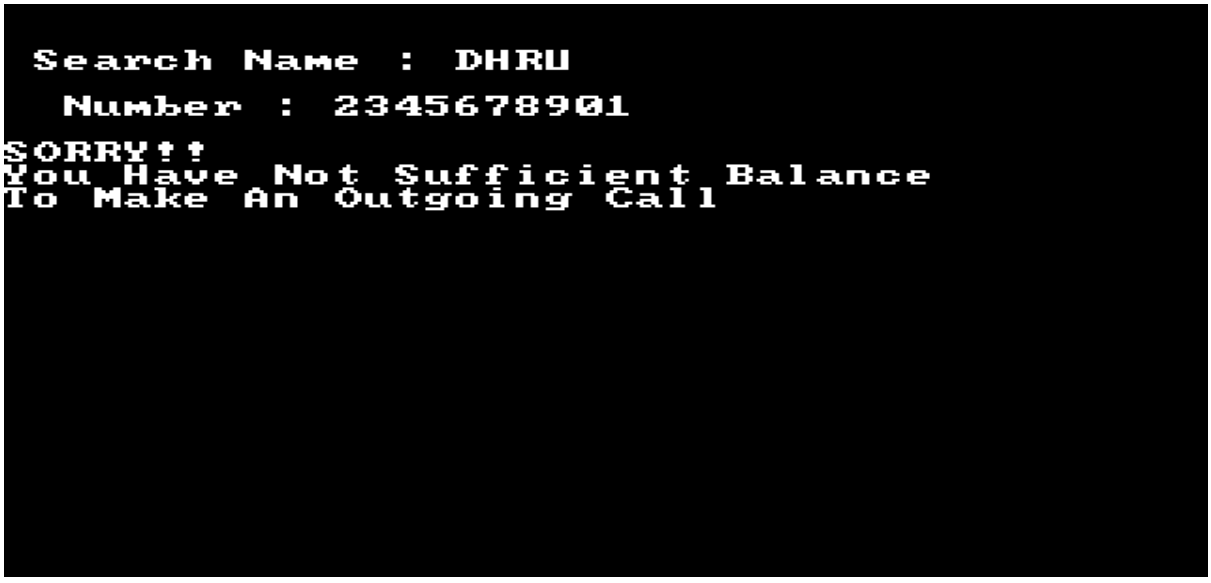
- **CREATE CONTACT**



- **VIEW CONTACT**

- **DELETE CONTACT**

- **CALL CONTACT**



- **SPEED DIAL**