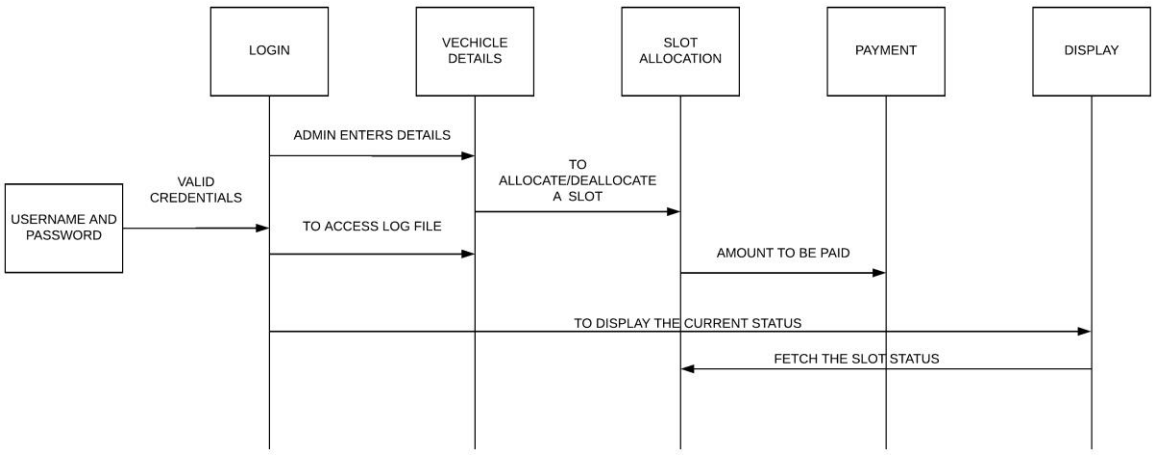
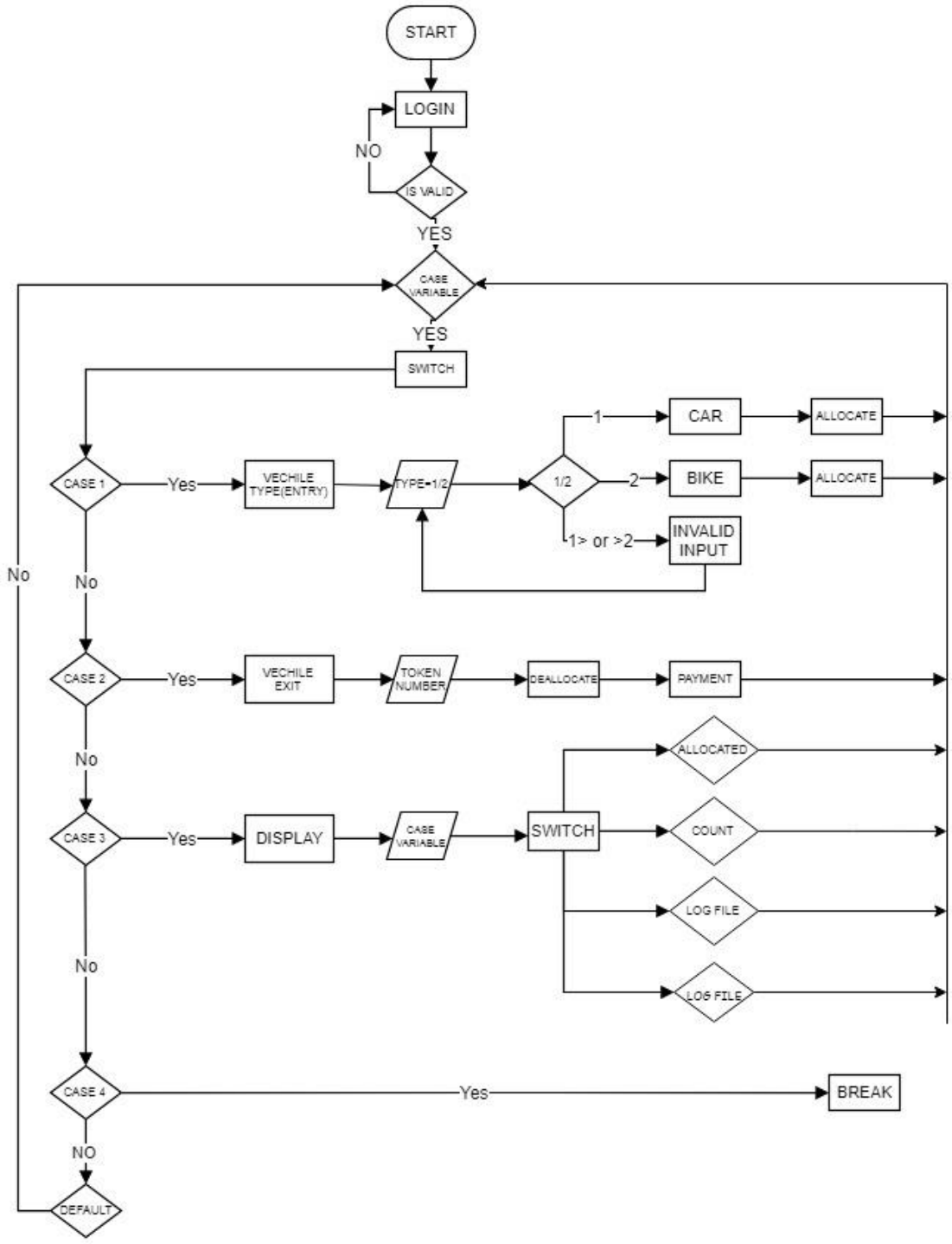
VEHICLE PARKING MANAGEMENT SYSTEM

CONTROL FLOW DIAGRAM



FLOW CHART


START
LOGIN
NO
IS VALID
YES
CASE VARIABLE
YES
SWITCH
CASE 1
Yes
VECHILE TYPE(ENTRY)
TYPE=1/2
1/2
1
CAR
ALLOCATE
2
BIKE
ALLOCATE
1> or >2
INVALID INPUT
No
No
CASE 2
Yes
VECHILE EXIT
TOKEN NUMBER
DEALLOCATE
PAYMENT
No
CASE 3
Yes
DISPLAY
CASE VARIABLE
SWITCH
ALLOCATED
COUNT
LOG FILE
LOG FILE
No
CASE 4
Yes
BREAK
NO
DEFAULT

MODULE 1 (LOGIN)

ALGORITHM

Step 1: Start the program
Step 2: Get username and password from security
Step 3: Compare the username and password entered by the security with the existing password
Step 4: If the username and the password is correct, the security can login
Step 5: Otherwise, the security cannot login.
Step 6: Stop the program

PSEUDO CODE

BEGIN
Print “username”
Input uname
Print “password”
Input pass
If(uname==”admin1 or admin2”) && if (pass==”pass”)
True: Print “login successfull”
False: Print “Invalid username or password”
END

MODULE 2(VECHILE DETAILS)

ALGORITHM

step 1: start the program
step 2: get the registration number and vehicle type
step 3: record its entry time and write all details into log file
step 4: allocate token no and allocate parking
step 5: stop the program

PSEUDO CODE

BEGIN
case input
get regno and vehicle type
time_t mytime = time(NULL)
initialize tokenno
get start time = ctime(&mytime)
fputs(text,fptr)
END

MODULE 3 (SLOT ALLOCATION)

ALGORITHM:

Step 1: Start
Step 2: Get the token number and the type of the vehicle
Step 3: If the type is two wheeler then store it in array “two”
Step 4: Free spaces are represented as “0”
Step 5: Traverse the array and place the vehicle in the free space
Step 6: Return the slot number
Step 7: Stop

PSEUDOCODE

```
BEGIN
Input tokennumber
Input type
If type==1
Loop i=0-2,j=0-50
a[i][j]=0
Loop i=0-2,j=0-50
If(two[i][j]==0) do two[i][j]=tokennumber
Display slotnumber
If type==2
Loop i=0-2,j=0-50
a[i][j]=0
Loop i=0-2,j=0-50
If(four[i][j]==0) do four[i][j]=tokennumber
Display slotnumber
End
```

MODULE 4 (PAYMENT)

ALGORITHM

step 1: start the program
step 2: get the registration number
step 3: check its entry time and note exit time
step 4: calculate total durations and calculate charges
step 5: display total charges
step 6: write all details into log file
step 7: stop the program

PSEUDO CODE

```
BEGIN
time_t mytime = time(NULL)
get tokenno
get exit time = ctime(&mytime)
 totalduration=endtime-starttime
parkingcharges=totalduration*fare
fputs(text,fp)
```

MODULE 5 (DISPLAY)

ALGORITHM

step 1: start the program
step 2: get the switch case variable
step 3: based on the case variable execute the functions.
step 4: 1 deals with allocation representation,2 deals with total vehicle count in parking,3 arrival log file,4 with departure log file
step 5: display the required case.
step 6: stop the program.

PSEUDO CODE

```
BEGIN
Input casevariable
switch casevariable
case 1: Display allocation representation
case 2: Display total vehicle count in parking
case 3: Display arrival log
case 4: Display departure log
END
```