TW :- 5

Design, develop, code and run the program in any suitable language to

solve the commission problem. Analyze it from the perspective of decision

table-based testing, derive different test cases, execute these test cases and

discuss the test results.

ALGORITHM

Step 1: Input 3 integer numbers which represents number of Locks, Stocks

and Barrels sold.

Step 2: compute the total sales =(Number of Locks sold \*45) + (Number of

Stocks sold \*30) + (Number of Barrels sold \*25)

Step 3: if a totals sale in dollars is less than or equal to $1000

then commission = 0.10\* total Sales do step 6

Step 4: else if total sale is less than $1800

then commission1 = 0.10\* 1000

commission = commission1 + (0.15 \* (total sales – 1000))

do step 6

Step 5: else commission1 = 0.10\* 1000

commission2 = commission1 + (0.15 \* 800))

commission = commission2 + (0.20 \* (total sales – 1800)) do

step 6

Step 6: Print commission.

Step 7: Stop.

#include<stdio.h>

#include<conio.h>

int main()

{

int locks, stocks, barrels, t\_sales, flag = 0;

float commission;

clrscr();

printf("Enter the total number of locks");

scanf("%d",&locks);

if ((locks <= 0) || (locks > 70))

{

flag = 1;

}

printf("Enter the total number of stocks");

scanf("%d",&stocks);

if ((stocks <= 0) || (stocks > 80))

{

flag = 1;

}

printf("Enter the total number of barrelss");

scanf("%d",&barrels);

if ((barrels <= 0) || (barrels > 90))

{

flag = 1;

}

if (flag == 1)

{

printf("invalid input");

getch();

exit(0);

}

t\_sales = (locks \* 45) + (stocks \* 30) + (barrels \* 25);

if (t\_sales <= 1000)

{

commission = 0.10 \* t\_sales;

}

else if (t\_sales < 1800)

{

commission = 0.10 \* 1000;

commission = commission + (0.15 \* (t\_sales - 1000));

}

else

{

commission = 0.10 \* 1000;

commission = commission + (0.15 \* 800);

commission = commission + (0.20 \* (t\_sales - 1800));

}

printf("The total sales is %d \n The commission is %f",t\_sales, commission);

getch();

return;

}

**Test cases 1:**

Enter the total number of locks 75

75

Enter the total number of stocks 15

15

Enter the total number of barrelss 45

45

invalid input

**Test cases 2:**

Enter the total number of locks 45

45

Enter the total number of stocks 35

35

Enter the total number of barrelss 55

55

The total sales is 4450

The commission is 750.000000

**Test cases 3:**

Enter the total number of locks -5

-5

Enter the total number of stocks 40

40

Enter the total number of barrelss91 invalid input