**Algorithm for Medical management system**

Step 1: Start

Step 2: Declare character arrays such as p,d,m,di,a,t.

Step 3: Declare character array b and assign b value equal to life saving.

Step 4: Declare character array dc and assign dc value equal to Apex Clinic.

Step 5: Declare float variables such as mc,total assign value equal to zero and discount assign value equal to zero.

Step 6: Declare integer variables such as age and q.

Step 7: Declare double variable c.

Step 8: Display Clinic we offer 2% discount is:Apex Clinic.

Step 9: Display We offer 10% discount for life saving type of drug.

Step 10: Display We offer 20% discount if patient age is greater than 60.

Step 11: Display We offer 5% discount if bill amount exceeds 1000.

Step 12: Read Patient’s Name in character array p.

Step 13: Read Doctor’s Clinic Name in character array d.

Step 14: Read Medicine Name in character array m.

Step 15: Read Patient Disease diagnosed in character array di.

Step 16: Read Patient Address in character array a.

Step 17: Read Type of drug given to patient in character array t.

Step 18: Read Patient Age in integer variable age.

Step 19: Read Medicine cost per unit in float variable mc.

Step 20: Read Quantity of medicine in unit in integer variable q.

Step 21: Read Contact Number of Patient in double variable c.

Step 22: total equal to mc multiply by q.

Step 23: Calculate total and discount by using given conditions: if the patient’s age is above 60 then senior citizen discount of 20% is offered on total billed amount,10% discount is offered on life saving drugs,5% discount is offered to patient’s if the total bill exceeds 1000 and 2% discount is offered if patient visit Apex Clinic.

Step 24: if age>60

{

if strcmp(t,b) equal equal to 0

{

if total>1000

{

if strcmp(d,dc) equal equal to 0

{

discount equal to 0.37\*total

total equal to total-discount

}

else

{

discount equal to 0.35\*total

total equal to total-discount

}

}

else if strcmp(d,dc) equal equal to 0

{

discount equal to 0.32\*total

total equal to total-discount

}

else

{

discount equal to 0.3\*total

total equal to total-discount

}

}

else if total>1000

{

if strcmp(d,dc) equal equal to 0

{

discount equal to 0.27\*total

total equal to total-discount

}

else

{

discount equal to 0.25\*total

total equal to total-discount

}

}

else if strcmp(d,dc) equal equal to 0

{

discount equal to 0.22\*total

total equal to total-discount

}

else

{

discount equal to 0.2\*total

total equal to total-discount

}

}

else if strcmp(t,b) equal equal to 0

{

if total>1000

{

if strcmp(d,dc) equal equal to 0

{

discount equal to 0.17\*total

total equal to total-discount

}

else

{

discount equal to 0.15\*total

total equal to total-discount

}

}

else if strcmp(d,dc) equal equal to 0

{

discount equal to 0.12\*total

total equal to total-discount

}

else

{

discount equal to 0.1\*total

total equal to total-discount

}

}

else if total>1000

{

if strcmp(d,dc)==0

{

discount equal to 0.07\*total

total equal to total-discount

}

else

{

discount equal to 0.05\*total

total equal to total-discount

}

}

else if strcmp(d,dc) equal equal to 0

{

discount equal to 0.02\*total

total equal to total-discount

}

Step 25: Display Bill of patient

Step 26: Display Patient’s Name:display p.

Step 27: Display Contact Number of patient:display c.

Step 28: Display Doctor’s Clinic Name:display d.

Step 29: Display Patient’s Address:display a.

Step 30: Display Patient’s Age:display age.

Step 31: Display Medicine Name:display m.

Step 32: Display Type of drug given to patient:display t.

Step 33: Display Quantity of medicine in unit:display q.

Step 34: Display Patient Disease diagnosed:display di.

Step 35: Display Medicine Cost per unit:display mc.

Step 36: Display Discount offered to patient:display discount.

Step 37: Display Total Bill to be payed:display total.

Step 38: Stop