1. **CALCULATING ELECTRICITY BILL**

**FLOW CHART:**

**Amount=0**

**F.t.c=0,D.C=0**

**Unit<=100**

**Unit= (This month unit)**

**-(Pre month unit)**

**Read the value of this month unit, pre month unit**

No

Yes

No

Yes

**Unit>100&**

**Unit<=200**

**Amount=((unit-100)\*1.5)**

**D.C=18,F.T.C=20**

No

Yes

**Amount=(unit-100)\*1.5+(unit-200)\*3.5D.C**

**D.C=48,F.T.C=30**

**Unit>200&**

**Unit<=500**

No

**Unit>=500**

Yes

**Amount=(unit-100)\*1.5+(unit-200)\*3.5+(unit-500)\*4.5)**

**D.C=100,F.T.C=75**

**Total Amount=**

**Amount+F.T.C+D.C**

**Print Total Amount**

**Calculating Electricity Bill**

**Aim:-**

To draw flowchart and write algorithm for calculating the electricity bill.

**Algorithm:-**

Step 1 : Start

Step 2 : Enter the this month unit, Previous month unit

Step 3 : Unit = This month unit-Pre month unit

Step 4: Check < 100.no amount to pay else go to next step.

Step 5 : Check unit > 100 & unit < =200, D.C.=18, F.T.C. = 20 Print the

Process of condition.

Step 6 : Check unit > 200 & unit <= 500, if true D.C.=48,F.T.C.=30 and

print the process of 100

Step 7 : Check unit > 500: if true D.C=100 F.T.C=75 print its process

Step 8 : Total amount = amount + F.T.C.+D.C

Step 9 : Print total amount

Step 10 : Stop.

**pseudocode.**

Step 1 : BEGIN

Step 2 : READ the value of this month unit ,previous month unit

step 3 : unit = this month unit –pre month unit

step 4 : IF unit = 100

no amount to pay

**ELSE**

Go to next step

step 5: IF check unit> 100 & unit <=200 D.C.=18,F.T.C.=20

PRINT the process of condition

Step 6 : IF check the unit > 200 & unit <= 500

if true D.C = 48, F.T.C. = 30

PRINT the process of 100

Step 7 : IF check unit > 500

if true D.C. = 100 F.T.C. = 75

PRINT its process

Step 8 : Total amount = amount + F.T.C+ D.C

Step 9 : PRINT Total amount

Step 10 : END.

**RESULT**

The algorithm , flow chart & pseudocode written for the given

problem.

1. **CALCULATE THE RETAIL SHOP BILLING**

**FLOW CHART:**

**Read the Bill no, Read the customer Name Phone No., Address**

**IfN==100**

**Enter no.of items purchased:N**

**Sum=0**

Yes

No

**Sum=0,i=1**

No

**If<=N**

Yes

**Read the value of item:V**

**Sum=sum+V**

**i+**

**if sum>2000**

**Total amount=sum**

**D.A=sum\*0.20**

**Print Total amount**

**Total amount=sum-DA**

**Aim:-**

To draw flowchart and write algorithm for calculating the electricity bill.

**Algorithm:-**

Step 1 : Start

Step 2 : Read the Bill number

Step 3 : Enter the customer name,phone no, address

Step 4: Get the total number of item purchased :N

Step 5 : If N= = 0:

5.1: If Yes,sum = 0

5.2 : No, Goto step 8

Step 6 : Initialize i=1, sum = 0

Step 7 : If I < = N

7.1: If yes, move to further step

7.1.1 : Read the value of product :V

7.1.2 : sum = sum +V

7.1.3: If increment of I, i+1

7.2 : No go to step 8

Step 8 : If sum > 2000

8.1: If yes ,sum\*0.20=discount amount

8.1: total amount =sum – D.A

8.1.2: print total amount

8.2 : if no go to step 9

step9 : print sum

Step 10 : Stop.

**pseudocode.**

Step 1 : BEGIN

Step 2 : READ the bill no

step 3 : Enter the customer name , phone number, address

step 4 : GET the total number of item purchased:N

step 5: IF N = = 0

IF yes, sum = 0

ELSE

NO , goto step : 8

Step 6 : INITIALIZE i=1, sum = 0

Step 7 : IF I < = N

IF Yes move to further step

READ the value of product :V

Sum = Sum+ V

IF increment of I, i+1

ELSE

No goto the step 8

Step8 : IF sum > 2000

IF yes,sum\*0.20 = Discount Amount

Total amount = sum – D.A

PRINT Total amount

ELSE

NO goto step 9

Step 9 : PRINT sum

Step 10 : END

**RESULT**

The algorithm , flow chart & pseudocode written for the given

problem.

1. **CALCULATING SINE SERIES**

**FLOW CHART:**

**Get the number of items(n)**

**if i<=n**

**Initialize i = 1,**

**Series+x**

False

True

**Sum=[(-1)\*\*i)\*[x\*\*(2i+1)/(2i+1)!**

**Series=Series+Sum**

**Read the value of item:V**

**i=i+1**

**Aim:-**

To draw flowchart and write algorithm for calculating the electricity bill.

**Algorithm:-**

Step 1 : Start

Step 2 : Read the number of item

Step 3 : Initialize I = 1, series = x

Step 4: IF I <=n, yes go to step 5, no go to step 8

Step 5 : sum = ( (-1 ) \*\*i) \*( x\*\*(2i+1) ) / (2i+1)!

Step 6 : Series = series + sum

Step 7 : i=i+1

Step 8 : Print i

Step 9 : Stop.

Step 1 : Start

Step 2 : Read the number of item

Step 3 : Initialize I = 1, series = x

Step 4: IF I <=n, yes go to step 5, no go to step 8

Step 5 : sum = ( (-1 ) \*\*i) \*( x\*\*(2i+1) ) / (2i+1)!

Step 6 : Series = series + sum

Step 7 : i=i+1

Step 8 : Print i

Step 9 : Stop.

Flow Chart:

W=317Kg

W=256Kg

W=182Kg

**Print the Weight**

**Else print as can’t find the weight**

**if m=Scrambler**

**if m=bobber**

**if m=chopper**

**Get the type of Motor cycle as m**

Flow Chart:

**Read Pf I,V**

Calculate

P=V3\*PF\*I\*V

**Display the result is P**

**Initialize i=I**

**Total weight**

**Number of iron rods**

True

**Unit weight = D^2/162**

**Get the diameter of the rod**

**Weight= No. of rod\*Diameter\* weight**

**i=i+1**

**Total Weight= TW+W**

**if i<=n**

False

**Get the number of rods of Diameter (D)**

**Display the total weight of rod**

Flow Chart:

**Enter the no.of Students:N**

**i=1**

No

**if i<=n**

Yes

Yes

Yes

Yes

Yes

No

No

No

No

No

**Grade =D**

**Grade =C**

**Grade =B**

**Grade =A**

**Grade =0**

**i+=1**

**Print name: Grade**

**if avg<35**

**if avg>=35 and avg<50**

**if avg>=50 and avg<75**

**if avg>=75 and avg<90**

**if avg>=90 and avg<=100**

**Avg=Total/3**

**Total =m1+m2+m3**

**Read marks m1,m2,m3 & Name**