SET-1

ALGORITHM

# Greatest of 3 numbers

# Step 1: start

# Step 2: give 3 numbers let they be num a, num b, num c to check which is greatest among given 3 numbers

# Step 3: IF num a>num b,

# IF num a>num c

# Output num a is greater

# IF num a<num b,

# CHECK IF loop begins

# num b>num c

# Output num b is greater

# IF loop begins num b< num c

# Output num c is greater

# If ends

# If ends

# If ends

# Step 5: stop

PSEUDOCODE

# BEGIN

# INPUT give 3 numbers to check which is the greatest among

# the 3 given numbers numa,numb,numc

# COMPUTE IF num a>num b,

# check IF num a>num c

# Output num a is greater

# IF num a<num b,

# check IFnum b>num c

# Output num b is greater

# IF num b< num c

# Output num c is greater

# IF ENDS

# IF ENDS

# IF ENDS

# END

ALGORITHM

# CHECK WHETHER EVEN OR ODD

# Step 1: start

# Step 2: give the number to check whether it’s even or odd

# Step 3: IF calculate number%2.

# it gives zero

# Output even number,

# IF not it’s

# Output odd number

# IF ends

# Step 4: stop

PSEUDOCODE

# BEGIN

# INPUT number

# IF COMPUTE number%2=0

# OUTPUT IF it’s=0 even

# IF not it’s a odd number

# IF ENDS

# END

ALGORITHM

# 3. Add three numbers

# Step 1: start

# Step 2: give 3 numbers to add num A, num B,num C

# Step 3: calculate ADD num A+num B+ num C

# Step 4: output num

# Step 5: stop

PSEUDOCODE

# BEGIN

# INPUT Get 3 numbers num A, num B, num C

# COMPUTE

# “ADD” operation num0+num1+num2

# Output num A+ num B+ num C

# END

# 4.PRINT NAME

ALGORITHM

# Step 1: start

# Step 2: add function NAME

# Step 3: output “WELCOME VISHNU”

# Step 4: main fuction & call the NAME function

# Step 5: stop

PSEUDOCODE

# BEGIN

# ADD FUNCTION “NAME”

# OUTPUT “WELCOME VISHNU”

# MAIN FUNCTION & CALL “NAME” FUNCTION

# END

ALGORITHM

# 5. CHECK WHETHER ELIGIBLE TO VOTES

# Step 1: begin

# Step 2: get age

# Step 4:

# IF calculate IF age is >18 voter is eligible

# Step 4: IF NOT voter is not eligible to vote

# If ends

# Step 5: stop

PSEUDOCODE

# BEGIN

# INPUT age

# IF

# COMPUTE IF age of voter is >18, he is eligible to vote

# IF NOT voter is not eligible to vote

# IF ENDS

# END

ALGORITHM

# 6.IMPLEMENT MATHMETICAL CALCULATOR BASED ON USERS CHOICE

# Step 1: start

# Step 2: output user to select 1,2,3,4 choice

# Step 3: 1 for addition,

# 2 for differrence,

# 3 for multiplication,

# 4 for product

# Step 4: input numa,numb

# Step 5: IF

# user choosen 1 then output ADD numa+numb

# Step 6: IF

# user choosen 2

# IF numa>numb then output subtract numa-numb.

# IF numa<numb then output subtract numa-numb

# IF

# Step 7: IF user choosen 3 then multiply numa,numb

# output numa\*numb

# IF

# Step 8: IF user choosen 4 then divide numa,numb

# Output numa/numb

# IF ends

# IF ends

# IF ends

# IF ends

# Step 9: stop

PSEUDOCODE

# BEGIN

# INPUT numa,numb

# OUTPUT Give user to select 1,2,3,4 chooses to select

# INPUT 1 or 2 or 3 or 4

# IF

# IF USER CHOOSEN 1 ADD numa,numb

# OUTPUT numa+numb

# IF

# IF USER CHOOSEN 2 IF numa is greatesr

# SUBTRACT numa>numb,

# IF numb is greatest

# SUBTRACT numa<numb

# OUTPUT numa-numb

# IF

# IF USER CHOOSEN 3 MUTIPLY numa,numb

# OUTPUT numa\*numb

# IF

# IF USER CHOOSEN 4 DIVIDE numa,numb

# OUTPUT numa/numb

# IF ENDS

# IF ENDS

# IF ENDS

# IF ENDS

# END

# 7. N STUDENTS AND THEIR N SUBJECTS AVERAGE

ALGORITHM

# Step 1: start

# Step 2: student count=1

# Step 3: output ”enter the number of students”

# Step 4: input students

# Step 5: “enter the number of subjects”

# Step 6: input number

# Step 7:

# WHILE student count<=students

# Count=1

# Sum=0

# While

# WHILE count<=number

# Output “enter the marks of subject” & count

# Input I

# Sum=sum+I

# Count=count+1

# While ends

# Step 8: output “total marks=” & sum

# Step 9: output “average = “& sum/number

# Step 10: student count = student count + 1

# While ends

# Step 11: stop

PSEUDOCODE

# BEGIN

# STUDENT COUNT = 1

# OUTPUT “enter the number of students”

# INPUT number of students

# Output “enter the number of subjects”

# INPUT number of subjects

# WHILE

# Students count<= students

# Count = 1

# Sum = 0

# WHILE

# COUNT<=NUMBER

# OUTPUT “enter the marks of subject” & count

# INPUT I

# SUM=SUM+I

# COUNT = COUNT+1

# WHILE

# OUTPUT “total marks=” & sum

# “average=” & sum/number

# STUDENT COUNT=STUDENT COUNT+I

# WHILE ENDS

# END

8.EB SUM

ALGORITHM

# Step 1: start

# Step 2: output “choose 1 for domestic or choose 2 for commercial”

# Step 3: input 1 or 2

# Step 4: enter the number of units

# Step 5: input number of units

# While

# Step 6: IF user choose 1 calculate

# IF

# IF the units are <=100

# output units\*1,

# IF

# IF units are<=200

# output units \*2.5,

# IF

# IF the units are <=500

# output units\*4,

# IF

# IF the units are >=501

# output units\*6,

# if ends

# if ends

# if ends

# if ends

# IF

# user choose 2

# Calculate

# IF

# IF the units are <100

# output units\*2,

# IF

# IF the units are <200

# output units\*4.5,

# IF

# IF the units are <500

# output units\*6,

# IF

# IF the units are >=501

# output units\*7

# IF

# IF ENDS

# IF ENDS

# If ENDS

# Step 7: total amount

# Step 8: stop

PSEUDOCODE

# BEGIN

# OUTPUT Give user to choose 1 for domestic or 2 for commercial

# INPUT Number

# OUTPUT Give number of units

# INPUT Number of units

# COMPUTE IF user choosen 1,

# IF

# IF units<=100

# OUTPUT units\*1

# IF

# IF units<=200

# OUTPUT units\*2.5

# IF

# IF units<=500

# OUTPUT units\*4

# IF

# IF units>=501

# OUTPUT units\*6

# IF

# IF ENDS

# IF ENDS

# IF ENDS

# IF user choosen 2,

# IF

# IF units<=100

# OUTPUT units\*2,

# IF

# IF units<=200

# OUTPUT units\*4.5,

# IF

# IF units<=500

# OUTPUT units\*6,

# IF

# IF units>501

# OUTPUT units\*7

# IF ENDS

# IF ENDS

# IF ENDS

# IF ENDS

# OUTPUT TOTAL AMOUNT

# END

ALGORITHM

# 9.SUM OF EVEN NUMBERS OD PRODUCT OF ODD NUMBERS

# Step 1: start

# Step 2: output “give the value of N”

# Step 3: input N

# SUM=0

# PRODUCT=1

# I=1

# WHILE

# I<=N

# Step 4: IF

# I%2==0

# SUM=SUM+I

# I=I+1

# IF NOT

# PRODUCT=PRODUCT\*I

# I=I+1

# IF ENDS

# WHILE ENDS

# Step 5: output “sum of even number” & sum

# Step 6: output “product of odd numbers” & product

# Step 7: stop

PSEUDOCODE

# BEGIN

# OUTPUT “Give the value of N”

# INPUT N

# SUM=0

# PRODUCT=1

# I=1

# WHILE

# I<=N

# IF

# I%2==0

# SUM=SUM+I

# I=I+1

# IF NOT

# PRODUCT=PRODUCT\*I

# I=I+1

# IF ENDS

# WHILE ENDS

# OUTPUT “sum of even numbers” & sum

# OUTPUT “Product of odd numbers” & product

# END

# 

ALGORITHM

# 10. CONVERT CELSIUS INTO FARENHEIT

# Step 1: start

# Step 2: give the value in Celsius to convert in to fahrenheit

# Step 3: input Celsius value

# Step 4: calculate Fahrenheit = Celsius\*1.8+32

# Step 5: output fahrenheit

# Step 6: stop

PSEUDOCODE

# BEGIN

# OUTPUT Give Celsius value to convert to Fahrenheit

# INPUT Celsius

# COMPUTE Fahrenheit = Celsius\*1.8+32

# OUTPUT Fahrenheit

# END

ALGORITHM

# 11. SWAP TWO NUMBERS WITHOUT USING THIRD VARIABLE

# Step 1: input integer a, b

# Step 2: compute

# c=a

# a=b

# b=c

# output “a is “&a &”and b is” & b

# Step 6: stop

PSEUDOCODE

# BEGIN

# INPUT Integer a,b

# COMPUTE c=a

# a=b

# b=c

# OUTPUT “a is “&a&” and b is” & b

# END

ALGORITHM

# 12. CALCULATE AREA OF A TRIANGLE USING FUNCTION

ALGORITHM

# Step 1: start

# Step 2: add function AREA

# Step 4: input base,height

# Step 5: AREA=0.5\*BASE\*HEIGHT

# Step 6: output

# Step 7: stop

PSEUDOCODE

# BEGIN

# ADD FUCTION AREA

# INPUT base,height

# COMPUTE

# AREA=0.5\*BASE\*HEIGHT

# OUTPUT “AREA”

# END

ALGORITHM

# 13. CALCULATE AREA OF RECTANGLE AND PERIMETER CHECKING POSITIVE MEASURES

# Step 1: start

# Step 2: input length, breadth

# Step 3: IF

# IF given length is >0 or not.

# IF length <0 then

# output the given length is negative.

# IF length>0,

# then breadth>0 or not.

# IF breadth<0

# then output is given breadth is negative.

# If breadth>0 then,

# step 4: output

# area= length\*breadth.

# Output area

# Perimeter=2(length+breadth).

# Output perimeter

# IF ENDS

# IF ENDS

# step 5: stop

PSEUDOCODE

# BEGIN

# INPUT Length, breadth

# CALCULATE whether Length ,breadth>0.

# IF

# IF length<0 then output length is negative

# IF length>0 then check breadth,

# IF

# IF breadth<0 then breadth is negative,

# IF breadth is >0 then

# OUTPUT

# AREA= length\*breadth

# PERIMETER= 2 (length +breadth)

# OUTPUT area & perimeter

# IF ENDS

# IF ENDS

# END

ALGORITHM

# 14. SUM OF DIGITS OF GIVEN NUMBER

# Step 1: start

# Step 2: input x

# Step 3: compute sum=0

# Step 4: while loop ends

# x>0,

# y=x%10

# Sum=sum+y

# X=x/10

# While

# Step 5: output sum

# Step 6: stop

PSEUDOCODE

# BEGIN

# INPUT Int X

# COMPUTE WHILE

# X>0,

# SUM= 0

# Y=X%10

# SUM=SUM+Y

# X=X/10

# WHILE

# OUTPUT Sum

# END

# 15. REVERSE OF A NUMBER

ALGORITHM

# Step 1: start

# Step 2: input x(x>=1)

# Step 3: reverse=0

# Step 4: Calculate

# While X>=1

# Remainder=x%10

# Reverse=reverse\*10+reamainder

# x=x/10

# while

# Step 5: output reverse

# Step 6: stop

PSEUDOCODE

# BEGIN

# INPUT x(x>=1)

# REVERSE = 0

# COMPUTE

# WHILE X>=1

# REMAINDER= X%10

# REVERSE= reverse\*10+remainder

# X= X/10

# WHILE ENDS

# OUTPUT REVERSE

# END

# 16. DIVISION OF TWO NUMBERS WITHOUT USING DIVISION OPERATION

ALGORITHM

# Step 1: start

# Step 2: input a,b

# Step 3: C=0

# Step 4: compute

# While a>=b

# a=a-b

# c=c+1

# while ends

# step 5: output c

# output a

# step 6: stop

PSEUDOCODE

# BEGIN

# INPUT a,b

# C=0

# COMPUTE

# WHILE a>=b

# a=a-b

# c=c+1

# WHILE ENDS

# OUTPUT c

# OUTPUT a

# END

# 17. FIND THE PRODUCT OF GIVEN NUMBER

ALGORITHM

# Step 1: start

# Step 2: input X

# Step 3: product=1

# Step 4: while

# X>=1

# Step 5: y=X%10

# Product=product\*y

# X=x/10

# While

# Step 6: output

# Stop

PSEUDOCODES

# 

# BEGIN

# INPUT X

# WHILE X>=1

# Y=X%10

# PRODUCT= PRODUCT\*y

# X= x/10

# WHILE ENDS

# OUTPUT Product

# END

# 

SET-3

ALGORITHM

# 18. product of 2 numbers without using multiple operator

# Step 1: start

# Step 2: input A,B

# Step 3: PRODUCT = 0

# Step 4: while

# compute B>0

# Product=product+A

# B=B-1

# While ends

# Step 5: output product of A,B

# Stop

PSEUDOCODES

# BEGIN

# INPUT A,B

# WHILE

# COMPUTE B>0

# PRODUCT=PRODUCT+A

# B=B-1

# WHILE

# OUTPUT product of A & B

# END

# 19. AVERAGE OF 10 NUMBERS ON KEYBOARD

ALGORITHM

# STEP 1: Start

# STEP 2: Get an integer A, B, N

# STEP 3: output “B=0”

# FOR

# STEP 4: FOR statement “N=0 to 9 “steps

# STEP 5: output “B=A+B”

# STEP 6: input “the 10 real numbers”

# FOR ENDS

# STEP 7: SUM is “B=A+B”

# STEP 8: AVERAGE “SUM/TOT NO OF NUMBERS”

# STEP 9: STOP

PSEUDOCODES

# BEGIN

# GET                   integer A, B, N

# OUTPUT        B=0

# FOR

# COMPUTE        FOR N=0 TO 9 STEPS BY INCREASING

# OUTPUT           B=A+B

# INPUT              ENTER THE 10 NUMBERS

# FOR ENDS

# SUM IS “B=A+B”

# AVERAGE = SUM/TOT NO OF NOS

# END

# 

# 20. CUBE OF GIVEN N NUMBERS

ALGORITHM

# STEP 1: start

# STEP 2: get the integer A, N, C

# STEP 3: OUTPUT “enter the n integer”

# STEP 4: input N

# FOR

# STEP 5: assign A=1

# STEP 6: FOR variable “C=1 TO N”

# STEP 7:output A\*A\*A

# FOR ENDS..

# STEP 8: stop

PSEUDOCODE

# BEGIN

# GET            integer A,B,N

# OUTPUT    enter the n integer

# A=1

# FOR

# COMPUTE     FOR the variable N=0 TO N steps

# Output A\*A\*A

# FOR ENDS.

# OUTPUT          the given n cube number is “A”

# END

# 

# 21. MUTIPLICATION OF TABLE

ALGORITHM

# STEP 1: start

# STEP 2: Get the integer A,B,C

# STEP 3: output “the integer”

# STEP 4: Input A

# FOR

# STEP 5: FOR variable N=1 TO 10,A=1

# STEP 6: compute C=A\*B

# STEP 7: output A

# STEP 8: initialize multiply A and B

# FOR ENDS

# STEP 9: equal and C

# STEP 10: stop

PSEUDOCODE

# BEGIN

# GET              integer A,B,C

# OUTPUT    the integer A

# INPUT        integer A

# FOR

# COMPUTE    FOR variable N=1 TO 10 STEPS

# C=A\*B

# A=1

# Equal to C

# FOR ENDS..

# OUTPUT           Multiplication if integer table “C=A\*B”

# END

# 22.multiplication of N table

ALGORITHM

# STEP 1: Start

# STEP 2: Get the integers A, B, N

# STEP 3: Compute S=0

# Compute A=1

# STEP 4: input N,A

# FOR

# STEP 5: FOR the variable N =A TO B

# FOR

# STEP 6: FOR variable N=1 to B

# STEP 7: Output A=A\*10+1

# FOR ENDS

# FOR ENDS

# STEP 8: stop

PSEUDOCODE

# BEGIN

# GET            Get an integer A, B, N

# INPUT        A AND B

# FOR

# OUTPUT       FOR A TO B

# FOR

# OUTPUT       FOR the variable 1 to B

# A=A\*10+1

# FOR ENDS

# FOR ENDS

# END

ALGORITHM

# 23. FACTORIAL OF GIVEN NUMBER

# Step 1: begin

# Step 2: output “give N”

# Step 3: input N

# Step 4: PRODUCT=1

# I=1

# FOR

# Step 5: PRODUCT=PRODUCT\*I

# FOR

# Step 6: output “factorial of given number N & product

# FOR ENDS

# FOR ENDS

# Step 7: end

PSEUDOCODE

# BEGIN

# OUTPUT give N

# INPUT N

# PRODUCT=1

# I=1

# FOR

# PRODUCT=PRODUCT\*I

# FOR ENDS

# OUTPUT factorial of given number N & product

# END

# 24SERIES

ALGORITHM

# Step 1: start

# step 2: s=0

# a=1

# step 3: input n

# FOR e=0 to n

# S=s+a

# a=a\*10+1

# FOR ENDS

# Step 4: output s

# Step 5: stop

PSEUDOCODE

# BEGIN

# S=0

# A=1

# INPUT N

# FOR e=0 to n

# S=s+a

# a=a\*10+1

# FOR ENDS

# OUTPUT S

# END

ALGORITHM

# 25.PALIDROME

# Step 1: begin

# Step 2: output give numbers

# Step 3: Input N

# step 4: T=N

# WHILE N>0

# R=N%10

# S=S\*10+R

# N=N/10

# WHILEENDS

# IF T=S

# Step 5: if satisfies given N is palindrome

# If not given N is not palindrome

# IFENDS

# Step 6: end

PSEUDOCODE

# BEGIN

# OUTPUT give N

# INPUT N

# INPUT R

# INPUT S

# T=N

# WHILE LOOP BEGINS

# N>0

# R=N%10

# S=S\*10+R

# N=N/10

# WHILE LOOP ENDS

# IF LOOP BEGINS

# OUTPUT given N is palindrome

# If not N is not palindrome

# END

# 26. AMSTRONG NUMBER

ALGORITHMS

# Step 1: start

# Step 2: input a

# d=a

# c=0

# FOR n=a to 0 decreasing

# Step 3: b=a%10

# c=b\*b\*b+c

# a=a/10

# FOR ENDS

# IF d==c

# Step 4: if satisfies Output it is amstrong number

# If not false

# If ends

# End

PSEUDOCODE

# BEGIN

# INPUT a

# D=A

# C=0

# FOR N=A TO DECREASING

# b=a%10

# c=b\*b\*b+c

# a=a/10

# FOR ENDS

# IF D==C

# OUTPUT if “true it is a amstrong number”

# If not false

# If ends

# END

# 

# 27.ARTHEMATIC PROGRESSION

# 

ALGORITHM

# Step 1: start

# Step 2: input intial number “a”

# Step 3: C=A

# Step 4: input give common difference “d”

# Step 5: input give number of terms “n”

# FOR i=0 to n-1

# IF i==0

# Step 6: output a & “+” & a+d

# Step 7: output “+” & a+d

# IF ENDS

# a=a+d

# for ends

# step 8: output “=” & (n/2)\*[(2\*c)+(n-1)\*d]

# step 9: stop

PSEUDOCODE

# BEGIN

# INPUT give intial number “a”

# C=A

# INPUT give common difference “d”

# INPUT give number of terms “n”

# FOR I = 0 to n-1

# IF i==0

# OUTPUT a & “+” & a+d

# OUTPUT “+” & a+d

# IF ENDS

# a=a+d

# FOR ENDS

# OUTPUT “=” & (n/2)\*[(2\*c)+(n-1)\*d]

# END

SET-3

ALGORITHM

# Step 1: start

# Step 2: add function CHARGE

# Step 3: output

# Choose 1 for electronics, choose 2 for textile, choose 3 for stationery, choose 4 for provisions, choose 5 for furniture

# Step 4: input type

# Step 5: IF TYPE==1

# Step 6: if satisfies

# Output

# Choose 9 for tv, choose 99 fridge, choose 999 for ac, choose 9999 for laptop, choose 99999 for mobiles

# Step 7: input option

# Step 6: IF option==9

# If yes

# Cost=40000

# Output cost of each tv 40000

# output give N

# input N

# cost=N\*40000

# output cost of tv & cost

# If not option==99

# Cost=20000

# Output cost of each fridge 20000

# Output give N

# Input N

cost= N\*20000

output cost of fridge & cost

if not option==999

cost=50000

output cost of each ac 50000

output give n

input n

cost=N\*50000

cost of ac & cost