Qbasic Programming Questions [180]

1. Using FUNCTION…END FUNTION, write a program to calculate the average of three numbers

```
DECLARE FUNCTION AVERAGE (A, B, C)
CLS
INPUT "ENTER FIRST NUMBER"; A
INPUT "ENTER SECOND NUMBER"; B
INPUT "ENTER THIRD NUMBER"; C
PRINT "AVERAGE OF THREE NUMBERS"; AVERAGE (A, B, C)

FUNCTION AVERAGE (A, B, C)
AVERAGE = (A + B + C) / 3
END FUNCTION
```

2. Write a program using SUB to find the average of any two numbers given by the user.

```
DECLARE SUB AVERAGE (A, B)
CLS
INPUT "ENTER FIRST NUMBER"; A
INPUT "ENTER SECOND NUMBER"; B
CALL AVERAGE (A, B)
END

SUB AVERAGE (A, B)
AV = (A + B) / 2
PRINT "AVERAGE OF TWO NUMBERS"; AV
END SUB
```

3. Using FUNCTION, write a program to calculate the sum, product, average and difference of two numbers.

```
DECLARE FUNCTION SUM (A, B)
DECLARE FUNCTION DIFF (A, B)
DECLARE FUNCTION PROD (A, B)
DECLARE FUNCTION AVERAGE (A, B)
CLS
INPUT "ENTER FIRST NUMBER"; A
INPUT "ENTER SECOND NUMBER"; B
PRINT "SUM OF TWO NUMBERS"; SUM (A, B)
PRINT "DIFFERENCE OF TWO NUMBERS"; DIFF (A, B)
PRINT "PRODUCT OF TWO NUMBERS"; PROD (A, B)
PRINT "AVERAGE OF TWO NUMBERS"; AVERAGE (A, B)
END

FUNCTION SUM (A, B)
SUM = A + B
END FUNCTION

FUNCTION DIFF (A, B)
DIFF = A - B
END FUNCTION

FUNCTION PROD (A, B)
PROD = A * B
END FUNCTION

FUNCTION AVERAGE (A, B)
AVERAGE = (A + B) / 2
END FUNCTION
```

4. Using FUNCTION, write a program to input any five numbers and display their sum using array (DIM)

```
DECLARE FUNCTION SUM (N ( ))
CLS
DIM N( 5)
FOR I = 1 TO 5
   INPUT "Enter any 5 numbers"; N (I)
NEXT I
PRINT "Sum of any 5 numbers is"; SUM(N ( ))
END
FUNCTION SUM (N ( ))
FOR I = 1 TO 5
   S = S + N (I)
NEXT I
SUM = S
END FUNCTION
```

5. Write a program in QBASIC to find square of a given number using FUNCTION…..END FUNCTION.

```
DECLARE FUNCTION SQUARE (N)
CLS
INPUT "ENTER ANY NUMBER"; N
PRINT "SQUARE OF NUMBER "; SQUARE (N)
END

FUNCTION SQUARE (N)
SQUARE = N ^ 2
END FUNCTION
```

6. Write a program in QBASIC to find square root of a given number using SUB…..END SUB.

```
DECLARE SUB SQROOT (N)
CLS
INPUT "ENTER ANY NUMBER"; N
CALL SQROOT (N)
END

SUB SQROOT (N)
S = N ^ (1 / 2)
PRINT "SQUARE ROOT OF NUMBER "; S
END SUB
```

7. Write a program in QBASIC to find cube of a given number using SUB…..END SUB.

```
DECLARE SUB CUBE (N)
CLS
INPUT "ENTER ANY NUMBER"; N
CALL CUBE (N)
END

SUB CUBE (N)
C = N ^ 3
PRINT "CUBE OF NUMBER "; C
END SUB
```

8. Write a program in QBASIC to find cube root of a given number using FUNCTION…..END FUNCTION.

```
DECLARE FUNCTION CBROOT (N)
CLS
INPUT "ENTER ANY NUMBER"; N
PRINT "CUBE ROOT OF NUMBER "; CBROOT (N)
END

FUNCTION CBROOT (N)
CBROOT = N ^ (1 / 3)
END FUNCTION
```

9. Write a program in QBASIC to find the sum of cube of two input numbers using SUB…..END SUB

```
DECLARE SUB CUBE (A, B,)
CLS
INPUT “ENTER FIRST NUMBER”; A
INPUT “ENTER SECOND NUMBER”; B
CALL CUBE (A, B)
END

SUB CUBE  (A, B)
C = A ^ 3 + B ^ 3
PRINT “SUM OF CUBE OF TWO NUMBERS “; C
END SUB
```

10. Write a program to calculate and print the simple interest using FUNCTION……END FUNCTION.

```
DECLARE FUNCTION INTEREST (P, T, R)
CLS
INPUT “ENTER PRINCIPAL”; P
INPUT “ENTER TIME”; T
INPUT “ENTER RATE”;R
PRINT “SIMPLE INTEREST=”; INTEREST (P, T, R)
END

FUNCTION INTEREST (P, T, R)
I = P* T * R / 100
INTEREST = I
    END FUNCTION
```

11. Using FUNCTION, write a program to calculate distance travelled by a body. (Hint: s=ut+ (1/2) at^2)

```
DECLARE FUNCTION DISTANCE (U, T, A)
CLS
INPUT “ENTER INITIAL VELOCITY”; U
INPUT “ENTER TIME”; T
INPUT “ENTER ACCELARATION”; A
PRINT “DISTANCE TRAVELLED = “; DISTANCE (U, T, A)
END

FUNCTION DISTANCE (U, T, A)
DISTANCE = U * T + 1 / 2 * A * T ^ 2
END FUNCTION
```

12. Using FUNCTION……END FUNCTION, write a program to read perpendicular and base of a right angled triangle to find hypoteneous.

```
DECLARE FUNCTION HYP(P, B)
CLS
INPUT "ENTER PERPENDICULAR"; P
INPUT "ENTER BASE"; B
PRINT "HYPOTENUSE="; HYP (P, B)
END
FUNCTION HYP (P, B)
HYP = (P ^ 2 + B ^ 2) ^ (1 / 2)
END FUNCTION
```

13. Using FUNCTION……END FUNCTION, write a program to input cost price and selling price from the keyboard to calculate profit.

```
DECLARE FUNCTION PROFIT (CP, SP)
CLS
INPUT “ENTER COST PRICE”; CP
INPUT “ENTER SELLING PRICE”; SP
PRINT “PROFIT AMOUNT=”; PROFIT (CP, SP)
END
FUNCTION PROFIT (CP, SP)
P = SP – CP
PROFIT = P
END FUNCTION
```

14. Write a program using SUB……END SUB to find the area of rectangle. [A=L*B]

```
DECLARE SUB AREA (L, B)
CLS
INPUT “ENTER LENGTH”; L
INPUT “ENTER BREADTH”; B
CALL AREA (L, B)
END

SUB AREA (L, B)
A = L * B
PRINT “AREA OF RECTANGLE=”; A
END SUB
```

15. Write a program using FUNCTION……END FUNCTION to find the perimeter of rectangle. [P=2(L+B)]

```
DECLARE FUNCTION PER (L, B)
CLS
INPUT “ENTER LENGTH”; L
INPUT “ENTER BREADTH”; B
PRINT “PERIMETER OF RECTANGLE”; PER (L, B)
END

FUNCTION PER (L, B)
PER = 2 * (L + B)
END FUNCTION
```

16. Write a program using SUB……END SUB to find the area and perimeter of square. [P=4L] [A=L^2]

```
DECLARE SUB AREA (L)
DECLARE SUB PERIMETER (L)
CLS
INPUT “ENTER LENGTH”; L
CALL AREA (L)
CALL PERIMETER (L)
END

SUB AREA (L)
A = L ^ 2
PRINT “AREA OF SQUARE”; A
END SUB

SUB PERIMETER (L)
P = 4 * L
PRINT “PERIMETER OF SQUARE”; P
END SUB
```

17.Write a program in QBASIC to find the area of four wall of a room using FUNCTION…..END FUNCTION.

```
DECLARE FUNCTION AREA (L, B, H)
CLS
INPUT “ENTER LENGTH”; L
INPUT “ENTER BREADTH”; B
INPUT “ENTER HEIGHT”; H
PRINT “AREA OF FOUR WALLS”; AREA(L, B, H)
END

FUNCTION AREA (L, B, H)
A = 2 * H * (L + B)
AREA = A
    END FUNCTION
```

18.Write a sub program cost (l,b,h,c) to find the cost of painting the four walls of a room.

```
DECLARE SUB AREA (L, B, H, C)
CLS
INPUT "Enter Length"; L
INPUT "Enter Breadth"; B
INPUT "Enter Height"; H
INPUT "Enter Cost"; C
CALL AREA (L, B, H, C)
END

SUB AREA (L, B, H, C)
A = 2 * H * (L + B)
T=A*C
PRINT "Cost of painting area of four walls is"; T
END SUB
```

19.Write a program using FUNCTION…END FUNCTION to find area of the triangle.

```
DECLARE FUNCTION AREA (B, H)
CLS
INPUT "ENTER BREADTH"; B
INPUT "ENTER HEIGHT"; H
PRINT "AREA OF TRIANGLE ";
AREA( B, H)
END

FUNCTION AREA (B, H)
A = 1 / 2 * (B * H)
AREA = A
END FUNCTION
```

20.Write a program to calculate the area of triangle by using SUB…..END SUB.
[Hints:
Area= $\sqrt{s(s-a)(s-b)(s-c)}$ **]**

```
DECLARE SUB AREA (A, B, C)
CLS
INPUT "ENTER VALUE FOR FIRST SIDE "; A
INPUT "ENTER VALUE FOR SECOND SIDE "; B
INPUT "ENTER VALUE FOR THIRD SIDE "; C
CALL AREA (A, B, C)
END

SUB AREA (A, B, C)
S = (A + B + C) / 2
AR = (S * (S – A) * (S – B) * (S – C)) ^ (1 / 2)
PRINT "AREA OF TRIANGLE"; AR
END SUB
```

21.Write a program using SUB….END SUB to get radius of circle and then print its circumference. [C=2ΠR]

```
DECLARE SUB CIRCUM (R)
CLS
INPUT "ENTER RADIUS"; R
CALL CIRCUM (R)
END

SUB CIRCUM (R)
C = 2 * 3.14 * R
PRINT "CIRCUMFERENCE OF CIRCLE "; C
END SUB
```

22.Write a program using FUNCTION….END FUNCTION to get radius of the circle and display the area.

```
DECLARE FUNCTION AREA (R)
CLS
INPUT "ENTER RADIUS"; R
PRINT "AREA OF CIRCLE ";
AREA(R)
END

FUNCTION AREA (L, B)
A = 3.14 * R ^ 2
AREA = A
END FUNCTION
```

23.Write a program using FUNCTION…END FUNCTION to get radius of circle and then print its area and circumference.

```
DECLARE FUNCTION AREA (R)
DECLARE FUNCTION CIRCUM (R)
CLS
INPUT "ENTER RADIUS"; R
PRINT "AREA OF SQUARE ";
AREA(R)
PRINT "CIRCLE OF CIRCUMFERENCE"; CIRCUM (R)
END

FUNCTION AREA (R)
AREA = 3.14 * R ^ 2
END FUNCTION

FUNCTION CIRCUM (R)
CIRCUM = 2 * 3.14 * R
END FUNCTION
```

24.Write a program to declare user defined function using FUNCTION……END FUNCTION to calculate volume of cylinder.

```
DECLARE FUNCTION VOLUME (R, H)
CLS
INPUT "ENTER RADIUS"; R
INPUT "ENTER HEIGHT"; H
PRINT "VOLUME OF CYLINDER ";
VOLUME(R, H)
END

FUNCTION VOLUME (R, H)
VOLUME = 3.14 * R ^ 2 * H
END FUNCTION
```

25.Using Function…… End Function, write a program to calculate volume of hemisphere. [volume = 2/3 πR^3]

```
DECLARE FUNCTION VOLUME (R)
CLS
INPUT "ENTER RADIUS"; R
PRINT "VOLUME OF HEMISPHERE "; VOLUME(R)
END

FUNCTION VOLUME (R)
VOLUME = (2 / 3) * 3.14 * R ^ 3
END FUNCTION
```

26.Using Sub…… End Sub, write a program to calculate area of sphere. [area = $4\pi r^2$]

```
    DECLARE SUB TSAREA (R)
CLS
INPUT "ENTER RADIUS"; R
CALL TSAREA(R)
END

SUB TSAREA (R)
A= 4 * 3.14 * R ^ 2
PRINT "TOTAL SURFACE AREA OF SPHERE "; A
    END SUB
```

27.Write a function procedure to read the side of a cube. Calculate its volume and surface area. (Hint: vol=side^3 and sa=6 side^2]

```
DECLARE FUNCTION TSAREA (L)
DECLARE FUNCTION VOLUME (L)
CLS
INPUT "ENTER LENGTH"; L
PRINT "TOTAL SURFACE AREA OF CUBE "; TSAREA(L)
PRINT "VOLUME OF CUBE "; VOLUME(L)
END

FUNCTION TSAREA (L)
TSAREA = 6 * L ^ 2
END FUNCTION

FUNCTION VOLUME (L)
VOLUME = L ^ 3
END FUNCTION
```

28.Write a program using Function Module to calculate and print the volume of a box / cuboid. [V=L*B*H]

```
DECLARE FUNCTION VOLUME (L, B, H)
CLS
INPUT "ENTER LENGTH"; L
INPUT "ENTER BREADTH"; B
INPUT "ENTER HEIGHT"; H
PRINT "VOLUME OF CUBOID "; VOLUME(L, B, H)
END

FUNCTION VOLUME (L, B, H)
VOLUME = L * B * H
END FUNCTION
```

29.Write a program to create a procedure using SUB...END SUB to input the value of length, breadth and height of a box. The program should calculate the area and volume of the box.

```
DECLARE FUNCTION TSAREA (L, B, H)
DECLARE FUNCTION VOLUME (L, B, H)
CLS
INPUT "ENTER LENGTH"; L
INPUT "ENTER BREADTH"; B
INPUT "ENTER HEIGHT"; H
PRINT "TOTAL SURFACE AREA OF CUBOID "; TSAREA(L, B, H)
PRINT "VOLUME OF CUBOID "; VOLUME(L, B, H)
END

FUNCTION TSAREA (L, B, H)
TSAREA = 2 * (L * B + B * H + H * L)
END FUNCTION

FUNCTION VOLUME (L, B, H)
VOLUME = L * B * H
END FUNCTION
```

30.Write a program in QBASIC to find the total surface area of a box using FUNCTION….END FUNCTION.

```
DECLARE FUNCTION TSAREA (L, B, H)
CLS
INPUT "ENTER LENGTH"; L
INPUT "ENTER BREADTH"; B
INPUT "ENTER HEIGHT"; H
PRINT "TOTAL SURFACE AREA OF CUBOID"; TSAREA (L, B, H)
END

FUNCTION TSAREA (L, B, H)
TSAREA = 2 * (L * B + B * H + H * L)
END FUNCTION
```

31.Solve a quadratic equation $a^{x2}+bx+c=0$ on the basis of the coefficient values a, b, and c using sub procedure. [$x = \frac{-b \pm \sqrt{b^2-4ac}}{2a}$]

```
DECLARE SUB EQUATION (A, B, C)
CLS
INPUT "ENTER VALUE FOR A"; A
INPUT "ENTER VALUE FOR B"; B
INPUT "ENTER VALUE FOR C"; C
CALL EQUATION (A, B, C)
END
SUB EQUATION (A, B, C)
D = (B * B - 4 * A * C) ^ (1 / 2)
X = (-B + D) / 2 * A
Y = (-B - D) / 2 * A
PRINT "SOLUTION OF QUADRATIC EQUATION ARE"; X; Y
END SUB
```

32.Write a program using Function…..End Function to get temperature in Celsius from the user and then print the temperature in Fahrenheit.(hint: F=9C/5+32)

```
DECLARE FUNCTION CONVERT (C)
CLS
INPUT "ENTER TEMPERATURE IN CELCIUS"; C
PRINT "TEMPERATURE IN FARENHEIT="; CONVERT (C)
END

FUNCTION CONVERT (C)
F = 9 * C / 5 + 32
CONVERT = F
END FUNCTION
```

33.Write a program to input Fahrenheit and convert it into Celsius using SUB - END SUB.

```
DECLARE SUB CONVERT (F)
CLS
INPUT "ENTER TEMPERATURE IN FARENHEIT"; F
CALL CONVERT (F)
END
SUB CONVERT (F)
C = (F – 32) * (5 / 9)
PRINT "TEMPERATURE IN CELCIUS="; C
END SUB
```

34.Write a program to convert USD(dollar) into NC (NEPALI currency) using FUNCTION.

```
DECLARE FUNCTION CONVERT (D)
CLS
INPUT "ENTER CURRENCY VALUE IN DOLLAR"; D
PRINT "NEPALESE CURRENCY VALUE="; CONVERT (D)
END
FUNCTION CONVERT (D)
NC = D * 110
CONVERT = NC
END FUNCTION
```

35.Write a program to convert NC (NEPALI currency) into IC (Indian Currency) using DECLARE SUB.

```
DECLARE SUB CONVERT (NC)
CLS
INPUT "ENTER VALUE IN NEPALESE RUPEES"; NC
CALL CONVERT (NC)
END
SUB CONVERT (NC)
IC = NC / 1.6
PRINT "INDIAN CURRENCY VALUE="; IC
END SUB
```

36.WRITE A PROGRAM to ask a number as paisa and convert them into corresponding rupees only solve it using SUB Procedure.

```
DECLARE SUB CONVERT (P)
CLS
INPUT "ENTER VALUE IN PAISE"; P
CALL CONVERT (P)
END

SUB CONVERT (P)
R = P / 100
PRINT "Rupees="; R
END SUB
```

37.Write a program to input distance in kilometre and convert into meter using function procedure.

```
DECLARE FUNCTION CONVERT (K)
CLS
INPUT "ENTER DISTANCE IN KILOMETER"; K
PRINT "DISTANCE IN METER=";
CONVERT (K)
END

FUNCTION CONVERT (K)
M = K * 1000
CONVERT = M
END FUNCTION
```

38.Write a program to input days and convert into years, months and days using sub procedure.

```
DECLARE SUB CONVERT(D)
CLS
INPUT "ENTER DAYS"; D
CALL CONVERT(D)
END
SUB CONVERT (D)
Y = D \ 365
MO = D MOD 365
M = MO \ 30
D = MO MOD 30
PRINT Y; "YEARS " ; M;
"MONTHS"; D; "DAYS"
END SUB
```

39.Write a program to input seconds and convert into hours minutes and seconds using sub procedure.

```
DECLARE SUB CONVERT(S)
CLS
INPUT "ENTER TIME IN SECONDS"; S
CALL CONVERT(S)
END
SUB CONVERT (S)
H = S \ 3600
MI = S MOD 3600
M = MI \ 60
S = MI MOD 60
PRINT H; "HOURS"; M;
"MINUTES"; S; "SECONDS"
END SUB
```

40.Write a function convert (N) to read a number in inches and convert it into feet and inches.
[1 foot = 12 inches]

```
DECLARE FUNCTION CONVERT(N)
CLS
INPUT "ENTER VALUE IN INCHES"; N
PRINT CONVERT(N); "FEET"; IN; "INCHES"
END
FUNCTION CONVERT (N)
SHARED IN
IN = N MOD 12
CONVERT = N \ 12
END FUNCTION
```

41.Write a program to input any number and check whether the given no. is divisible by 3 and 7 or not using function procedure.

```
DECLARE FUNCTION CHECK$ (N)
CLS
INPUT "Enter any number"; N
PRINT "The given number is ";
CHECK$(N)
END

FUNCTION CHECK$ (N)
IF N MOD 3 = 0 AND N MOD 7 = 0 THEN
CHECK$ = "divisible by 3 and 7"
ELSE
CHECK$ = "not divisible by 3 and 7"
END IF
END FUNCTION
```

42.Using SUB…END SUB, write a program to test whether the given number is completely divisible by 13 or not.

```
DECLARE SUB CHECK (N)
CLS
INPUT "ENTER ANY NUMBER"; N
CALL CHECK (N)
END
SUB CHECK (N)
IF N MOD 13 = 0 THEN
PRINT "The given number is divisible by 13"
ELSE
PRINT "The given number is not divisible by 13"
END IF
END SUB
```

43.Write a program to declare a sub procedure module to decide whether an input no is multiple of 5 or not.

```
DECLARE SUB CHECK (N)
CLS
INPUT "ENTER ANY NUMBER"; N
CALL CHECK (N)
END
SUB CHECK (N)
IF N MOD 5 = 0 THEN
PRINT "The given number is multiple of 5"
ELSE
PRINT "The given number is not multiple of 5"
END IF
END SUB
```

44.Write a function program to find whether the given number is perfect number or not.

```
DECLARE FUNCTION PERFECT (N)
CLS
INPUT "ENTER ANY NUMBER"; N
PR = PERFECT (N)
IF PR = N THEN
PRINT "PERFECT NUMBER"
ELSE
PRINT "NOT PERFECT NUMBER"
END IF
END
FUNCTION PERFECT (N)
S = 0
FOR I = 1 TO N - 1
IF N MOD I = 0 THEN S = S + I
NEXT I
PERFECT = S
END FUNCTION
```

45.Write a sub program to find whether the given number is perfect square number or not.

```
DECLARE SUB PERFECT (N)
CLS
INPUT "ENTER ANY NUMBER"; N
CALL PERFECT (N)
END
SUB PERFECT (N)
S = SQR(N)
IF S = INT(S) THEN
PRINT "PERFECT SQUARE"
ELSE
PRINT "NOT PERFECT SQUARE"
END IF
END SUB
```

46.Write a program to display only perfect square numbers between 1 to 100 using SUB-END SUB.

```
DECLARE SUB PERFECT ( )
CLS
CALL PERFECT
END
SUB PERFECT ()
FOR N = 1 TO 100
   S = SQR(N)
   IF S = INT(S) THEN PRINT N,
NEXT N
END SUB
```

47.Write a program to define a function procedure which returns whether a input number is positive, negative or zero using SGN function.

```
DECLARE FUNCTION CHECK$ (N)
CLS
INPUT "Enter any number"; N
PRINT "The given number is ";
CHECK$(N)
END
FUNCTION CHECK$ (N)
S = SGN(N)
SELECT CASE S
   CASE 1
      CHECK$ = "positive number"
   CASE -1
      CHECK$ = "negative number"
   CASE 0
      CHECK$ = "zero"
END SELECT
END FUNCTION
```

48.Write a program to input any number and display whether it is odd or even using function procedure.

```
DECLARE FUNCTION CHECK$ (N)
CLS
INPUT “ENTER ANY NUMBER”; N
PRINT “THE GIVEN NUMBER IS “;
CHECK$(N)
END

FUNCTION CHECK$ (N)
IF N MOD 2 = 0 THEN
CHECK$ = “EVEN NUMBER”
ELSE
CHECK$ = “ODD NUMBER”
END IF
END FUNCTION
```

49.Write a program to input a year and display whether that year is a leap year or not. [divisible by 4 but not 100] using sub procedure.

```
DECLARE SUB CHECK (Y)
CLS
INPUT “ENTER YEAR”; Y
CALL CHECK (Y)
END
SUB CHECK (Y)
IF Y MOD 4 = 0 AND Y MOD 100 <>
0 OR Y MOD 400 = 0 THEN
PRINT “LEAP YEAR”
ELSE
PRINT “NOT LEAP YEAR”
END IF
END SUB
```

50.Write a program to input any number and check whether the given no. is positive or negative using sub procedure.

```
DECLARE SUB CHECK (N)
CLS
INPUT “ENTER ANY NUMBER”; N
CALL CHECK (N)
END
SUB CHECK (N)
IF N > 0 THEN
PRINT “ POSITIVE NUMBER”
ELSEIF N < 0 THEN
PRINT “ NEGATIVE NUMBER”
END IF
END SUB
```

51.Input the age of a person and find out whether the person is eligible to drive or not using function procedure. [age >=16]

```
DECLARE FUNCTION CHECK$ (A)
CLS
INPUT “ENTER YOUR AGE”; A
PRINT “YOU ARE “; CHECK$(A)
END
FUNCTION CHECK$ (A)
IF A >= 16 THEN
CHECK$ = “ELIGIBLE TO DRIVE”
ELSE
CHECK$ = “ NOT ELIGIBLE TO
DRIVE”
END IF
END FUNCTION
```

52.Input the age of a person and find out whether the person can cast vote or not using sub procedure. [age >=18]

```
DECLARE FUNCTION CHECK$ (A)
CLS
INPUT “ENTER YOUR AGE”; A
PRINT “YOU ARE “; CHECK$(A)
END
FUNCTION CHECK$ (A)
IF A >= 18 THEN
CHECK$ = “ELIGIBLE TO VOTE”
ELSE
CHECK$ = “ NOT ELIGIBLE TO
VOTE”
END IF
END FUNCTION
```

53.Write a program to enter any two numbers and display the smaller one using function procedure.

```
DECLARE FUNCTION SMALL (A,
B)
INPUT “ENTER ANY TWO
NUMBERS”; A, B
PRINT “THE SMALLER NUMBER
IS”; SMALL (A, B)
END
FUNCTION SMALL (A, B)
IF A < B THEN
SMALL = A
ELSE
SMALL = B
END IF
END FUNCTION
```

54.Write a program to enter any three numbers and display the smallest one using function procedure.

```
DECLARE SUB SMALL (A, B, C)
CLS
INPUT "ENTER ANY THREE NUMBERS"; A, B, C
CALL SMALL (A, B, C)
END
SUB SMALL (A, B, C)
IF A < B AND A < C THEN
S = A
ELSEIF B < A AND B < C THEN
S = B
ELSE
S = C
END IF
PRINT "THE SMALLEST NUMBER IS "; S
END SUB
```

55.Write a program to enter any three numbers and display the middle number using sub procedure.

```
DECLARE SUB MIDDLE(A, B, C)
CLS
INPUT "ENTER ANY THREE NUMBERS"; A, B, C
CALL MIDDLE (A, B, C)
END
SUB MIDDLE (A, B, C)
IF A > B AND A < C OR A < B AND A > C THEN
PRINT "THE MIDDLE NUMBER IS"; A
ELSEIF B > A AND B < C OR B < A AND B > C THEN
PRINT "THE MIDDLE NUMBER IS"; B
ELSE
PRINT "THE MIDDLE NUMBER IS"; C
END IF
END SUB
```

56.Write a program to input three different numbers in the main module then find the greatest number using SUB….END SUB.

```
DECLARE FUNCTION GREAT (A, B, C)
INPUT "ENTER ANY THREE NUMBERS"; A, B, C
PRINT "THE GREATEST NUMBER IS"; GREAT (A, B, C)
END
FUNCTION GREAT (A, B, C)
IF A > B AND A > C THEN
G = A
ELSEIF B > A AND B > C THEN
G = B
ELSE
G = C
END IF
GREAT = G
END FUNCTION
```

57.Write a sub program to input 20 different numbers in an array variable and find the largest and smallest number

```
DECLARE SUB GREAT ( )
DECLARE SUB SMALL ( )
DIM SHARED N(20)
CLS
FOR I = 1 TO 20
INPUT "ENTER THE NUMBERS"; N(I)
NEXT I
CALL GREAT
CALL SMALL
END

SUB GREAT
G = N(1)
FOR I = 2 TO 20
IF N(I) > G THEN G = N(I)
NEXT I
PRINT "GREATEST NUMBER"; G
END SUB

SUB SMALL
S = N(1)
FOR I = 2 TO 20
IF N(I) < S THEN S = N(I)
NEXT I
PRINT "SMALLEST NUMBER"; S
END SUB
```

58.Write a sub program to input three sides of a triangle and determine whether a triangle can be formed or not.

```
DECLARE SUB CHECK (A, B, C)
CLS
INPUT "ENTER THREE SIDES OF A TRIANGLE"; A,B,C
CALL CHECK (A, B, C)
END

SUB CHECK (A, B, C)
IF (A + B) > C AND (B + C) > A AND (A + C) > B THEN
PRINT "THE TRIANGLE CAN BE FORMED"
ELSE
PRINT "THE TRIANGLE CANNOT BE FORMED"
END IF
END SUB
```

59.Write a function program to input three sides of a triangle and determine whether a triangle is right angled triangle or not.

```
DECLARE FUNCTION CHECK$ (H, B, P)
CLS
INPUT "ENTER HEIGHT, BASE AND PERPENDICULAR"; H, B, P
PRINT CHECK$ (H, B, P)
END

FUNCTION CHECK$ (H, B, P)
IF H ^ 2 = (B ^ 2 + P ^ 2) THEN
CHECK$ = "IT IS A RIGHT ANGLED TRIANGLE"
ELSE
CHECK$ = "IT IS NOT A RIGHT ANGLED TRIANGLE"
END IF
END FUNCTION
```

60.Write a sub program to input three sides of a triangle and determine whether a triangle is equilateral, isosceles or scalene triangle or not.

```
DECLARE SUB CHECK (A, B, C)
INPUT “ENTER THREE SIDES OF A TRIANGLE”; A,B,C
CALL CHECK (A, B, C)
END
SUB CHECK (A, B, C)
IF A = B AND B = C THEN
PRINT “IT IS A EQUILATERAL TRIANGLE”
ELSEIF A = B OR B = C OR C = A THEN
PRINT “IT IS ISOSCELES TRIANGLE”
ELSEIF A < > B AND B < > C THEN
PRINT “ IT IS A SCALENE TRIANGLE”
END IF
END SUB
```

61.WAP to print the sum of the digits of a given numbers using SUB Procedure.

```
DECLARE SUB SUM (N)
CLS
INPUT "ENTER ANY NUMBER"; N
CALL SUM (N)
END
SUB SUM (N)
S = 0
WHILE N < > 0
R = N MOD 10
S = S + R
N = N \ 10
WEND
PRINT "SUM OF DIGITS"; S
    END SUB
```

62.Write a program to enter a number and find the product of its digits using FUNCTION procedure.

```
DECLARE FUNCTION PROD (N)
CLS
INPUT "ENTER ANY NUMBER"; N
PR = PROD (N)
PRINT "PRODUCT OF DIGITS"; PR
END

FUNCTION PROD (N)
P = 1
WHILE N < > 0
R = N MOD 10
P = P * R
N = N \ 10
WEND
PROD = P
    END FUNCTION
```

63.Write a sub program to input number and find sum of even digits.

```
DECLARE SUB SUMEVEN (N)
CLS
INPUT "ENTER ANY NUMBER"; N
CALL SUMEVEN (N)
END
SUB SUMEVEN (N)
S = 0
WHILE N < > 0
R = N MOD 10
IF R MOD 2 = 0 THEN S = S + R
N = N \ 10
WEND
PRINT "SUM OF EVEN DIGITS"; S
END SUB
```

64.Write a sub program to input number and count total no. of digits.

```
DECLARE SUB COUNT (N)
CLS
INPUT "ENTER ANY NUMBER"; N
CALL COUNT (N)
END
SUB COUNT (N)
C = 0
WHILE N < > 0
C = C + 1
N = N \ 10
WEND
PRINT "TOTAL NUMBER OF DIGITS"; C
END SUB
```

65.Write a function program to input number and display only odd digits.

```
DECLARE FUNCTION ODD (N)
REM
CLS
INPUT "ENTER ANY NUMBER"; N
PRINT " ODD DIGITS ARE ";
D = ODD(N)
END
FUNCTION ODD (N)
WHILE N <> 0
R = N MOD 10
IF R MOD 2 = 1 THEN PRINT R;
N = N \ 10
WEND
    END FUNCTION
```

66.Write a program using FUNCTION procedure to reverse and display the integer number having more than one digit passed as arguments from the main module. [Hint: 123 is reversed as 321].

```
DECLARE FUNCTION REV (N)
CLS
INPUT "ENTER ANY NUMBER"; N
PRINT " REVERSED DIGITS="; REV (N)
END
FUNCTION REV (N)
S = 0
WHILE N < > 0
R = N MOD 10
S = S * 10 + R
N = N \ 10
WEND
REV = S
END FUNCTION
```

67.Write a sub program to input any number and check whether the given no. is palindrome or not.

```
DECLARE SUB PALIN (N)
CLS
INPUT "ENTER ANY NUMBER"; N
CALL PALIN (N)
END
SUB PALIN (N)
A = N
S = 0
WHILE N < > 0
R = N MOD 10
S = S * 10 + R
N = N \ 10
WEND
IF A = S THEN
PRINT A; "IS PALINDROME"
ELSE
PRINT A; "IS NOT PALINDROME"
END IF
END SUB
```

68.Write a sub program to display first 20 palindrome numbers.

```
DECLARE SUB PALIN ( )
CLS
CALL PALIN
END
SUB PALIN
N = 1
CNT = 1
TOP:
A = N : S = 0
WHILE A < > 0
R = A MOD 10
S = S * 10 + R
A = A \ 10
WEND
IF N = S THEN
PRINT N,
CNT = CNT + 1
END IF
N = N + 1
IF CNT <= 20 THEN GOTO TOP
END SUB
```

69.Write a sub program to display all palindrome numbers from 1 to 200.

```
DECLARE SUB PALIN ( )
CLS
CALL PALIN
END
SUB PALIN
N = 1
FOR I = 1 TO 200
A = N
S = 0
WHILE A < > 0
R = A MOD 10
S = S * 10 + R
A = A \ 10
WEND
IF N = S THEN PRINT N,
N = N + 1
NEXT I
END SUB
```

70.Write a function program to input any number and check whether the given no. is Armstrong or not.

```
DECLARE FUNCTION ARM (N)
INPUT "ENTER ANY NUMBER"; N
A=N
AR = ARM (N)
IF A = AR THEN
PRINT A; "IS ARMSTRONG NUMBER"
ELSE
PRINT A; "IS NOT ARMSTRONG
NUMBER"
END IF
END
FUNCTION ARM (N)
S = 0
WHILE N < > 0
R = N MOD 10
S = S + R ^ 3
N = N \ 10
WEND
ARM = S
END FUNCTION
```

71.Write a sub program to display first 5 Armstrong numbers.

```
DECLARE SUB ARM ( )
CLS
CALL ARM
END
SUB ARM
N = 1 : CNT = 1
TOP:
A = N
S = 0
WHILE A < > 0
R = A MOD 10
S = S + R ^ 3
A = A \ 10
WEND
IF N = S THEN
PRINT N,
CNT = CNT + 1
END IF
N = N + 1
IF CNT <= 5 THEN GOTO TOP
END SUB
```

72.Write a sub program to display all Armstrong numbers from 1 to 500.

```
DECLARE SUB ARM ( )
CLS
CALL ARM
END
SUB ARM
N = 1
FOR I = 1 TO 500
A = N
S = 0
WHILE A <> 0
R = A MOD 10
S = S + R ^ 3
A = A \ 10
WEND
IF N = S THEN PRINT N,
N = N + 1
NEXT I
END SUB
```

73.Write a function program to input number and check whether the given no. is prime or composite.

```
DECLARE FUNCTION PRIME(N)
CLS
INPUT "ENTER ANY NUMBER"; N
P = PRIME (N)
IF P = 2 THEN
PRINT N; "IS PRIME NUMBER"
ELSE
PRINT N; "IS COMPOSITE NUMBER"
END IF
END
FUNCTION PRIME (N)
C = 0
FOR I = 1 TO N
IF N MOD I = 0 THEN C = C + 1
NEXT I
PRIME = C
END FUNCTION
```

74.Write a sub program to display all prime numbers from 1 to 100.

```
DECLARE SUB PRIME ( )
CLS
CALL PRIME
END

SUB PRIME
FOR N = 1 TO 100
C = 0
FOR I = 1 TO N
IF N MOD I = 0 THEN C = C + 1
NEXT I
IF C = 2 THEN PRINT N,
NEXT N
END SUB
```

75.Write a sub program to display first 20 prime numbers.

```
DECLARE SUB PRIME ( )
CALL PRIME
END
SUB PRIME
N = 1
CNT = 1
TOP:
C = 0
FOR I = 1 TO N
IF N MOD I = 0 THEN C = C + 1
NEXT I
IF C = 2 THEN
PRINT N,
CNT = CNT + 1
END IF
N = N + 1
IF CNT <= 20 THEN GOTO TOP
END SUB
```

76.Write a sub program to input number and check whether the given no. Composite or not.

```
DECLARE SUB COMPOSITE (N)
INPUT "ENTER ANY NUMBER"; N
CALL COMPOSITE (N)
END
SUB COMPOSITE (N)
C = 0
FOR I = 1 TO N
IF N MOD I = 0 THEN C = C + 1
NEXT I
IF C < > 2 THEN
PRINT N; "IS COMPOSITE NUMBER"
ELSE
PRINT N; "IS NOT COMPOSITE
NUMBER"
END IF
END SUB
```

77.Write a sub program to input any number and display the factors.

```
DECLARE SUB FACT (N)
CLS
INPUT "ENTER ANY NUMBER"; N
CALL FACT (N)
END

SUB FACT (N)
PRINT "FACTORS OF"; N; "=";
FOR I = 1 TO N
IF N MOD I = 0 THEN PRINT I;
NEXT I
END SUB
```

78.Write a program source code using FUNCTION.....END FUNCTION to calculate the factorial of an input number.

```
DECLARE FUNCTION FACT (N)
CLS
INPUT "ENTER ANY NUMBER"; N
PRINT "FACTORIAL ="; FACT (N)
END

FUNCTION FACT (N)
F = 1
FOR I = 1 TO N
F = F * I
NEXT I
FACT = F
END FUNCTION
```

79.Write a program using a SUB procedure module to print the multiplication table of any input number up to tenth terms. [SEE 2075 S2]

```
DECLARE SUB MUL (N)
CLS
INPUT "ENTER ANY NUMBER"; N
CALL MUL (N)
END

SUB MUL (N)
FOR I = 1 TO 10
PRINT N; "X"; I; "="; N * I
NEXT I
END SUB
```

80.Write a program in QBASIC to input any two different number and print HCF and LCM using SUB……END SUB

```
DECLARE SUB HCF(A, B)
CLS
INPUT "ENTER ANY TWO NUMBERS"; A, B
CALL HCF (A, B)
END

SUB HCF (A, B)
WHILE A MOD B < > 0
T = A MOD B
A = B
B = T
WEND
PRINT "H.C.F="; B
END SUB
```

81.Write a program in QBASIC to display the following series using SUB…. END SUB.
5, 55, 555 ….. up to 6^{th} terms

```
DECLARE SUB SERIES ( )
CLS
CALL SERIES
END
SUB SERIES
A = 5
FOR I = 1 TO 5
PRINT A,
A = A * 10 + 5
NEXT I
END SUB
```

82.Write a program using sub procedure to print series: 1, 11, 111, 1111, 11111

```
DECLARE SUB SERIES ( )
CLS
CALL SERIES
END
SUB SERIES
A = 1
FOR I = 1 TO 5
PRINT A,
A = A * 10 + 1
NEXT I
END SUB
```

83.Write a program to display 33333, 3333, 333, 33, 3 by using SUB.....END SUB

```
DECLARE SUB SERIES ( )
CLS
CALL SERIES
END
SUB SERIES
A = 33333
FOR I = 1 TO 5
PRINT A
A = A \ 10
NEXT I
END SUB
```

84.Write a sub procedure to display 1, 12, 123, 1234, 12345

```
DECLARE SUB SERIES ( )
CLS
CALL SERIES
END
SUB SERIES
FOR I = 1 TO 5
FOR J = 1 TO I
PRINT J;
NEXT J
PRINT
NEXT I
END SUB
```

85.Write a sub procedure to display 1, 22, 333, 4444, 55555

```
DECLARE SUB SERIES ( )
CLS
CALL SERIES
END
SUB SERIES
FOR I = 1 TO 5
FOR J = 1 TO I
PRINT I;
NEXT J
PRINT
NEXT I
END SUB
```

86.Write a sub procedure to display 12345, 1234, 123, 12, 1

```
DECLARE SUB DISP( )
CLS
CALL DISP
END
SUB DISP ( )
FOR I = 5 TO 1 STEP -1
   FOR J = 1 TO I
      PRINT J;
   NEXT J
   PRINT
NEXT I
END SUB
```

87.Write a sub procedure to display 55555, 4444, 333, 22, 1

```
DECLARE SUB SERIES ( )
CLS
CALL SERIES
END
SUB SERIES
FOR I = 5 TO 1 STEP -1
FOR J = 1 TO I
PRINT I;
NEXT J
PRINT
NEXT I
END SUB
```

88.Write a sub procedure to display 54321, 5432, 543, 54, 5

```
DECLARE SUB SERIES ( )
CLS
CALL SERIES
END
SUB SERIES
FOR I = 5 TO 1 STEP -1
FOR J = I TO 1 STEP -1
PRINT J;
NEXT J
PRINT
NEXT I
END SUB
```

89.Write a sub procedure to display 5, 54, 543, 5432, 54321

```
DECLARE SUB SERIES ()
CLS
CALL SERIES
END
SUB SERIES
FOR I = 5 TO 1 STEP -1
FOR J = 5 TO I STEP -1
PRINT J;
NEXT J
PRINT
NEXT I
 END SUB
```

90.Write a Qbasic Program to generate 1800, 1600, 1400, ……..10th term.

```
DECLARE SUB DISP( )
CLS
CALL DISP
END
SUB DISP ( )
A = 1800
FOR I = 1 TO 10
   PRINT A
   A = A - 200
NEXT I
END SUB
```

91.Write a sub procedure to display: 1, 121, 12321, 1234321, 123454321

```
DECLARE SUB SERIES ( )
CLS
CALL SERIES
END
SUB SERIES
A# = 1
FOR I = 1 TO 5
PRINT A# ^ 2
A# = A# * 10 + 1
NEXT I
END SUB
```

92.Write a sub procedure to display 123454321, 1234321, 12321, 121, 1

```
DECLARE SUB SERIES ()
CLS
CALL SERIES
END
SUB SERIES
A# = 11111
FOR I = 1 TO 5
PRINT A# ^ 2
A# = A# \10
NEXT I
END SUB
```

93.Write a sub program to generate 9,28,14,7,22,11……..10th term

```
DECLARE SUB SERIES ( )
CLS
CALL SERIES
END
SUB SERIES
A = 9
FOR I = 1 TO 10
PRINT A;
IF A MOD 2 = 0 THEN
A = A \ 2
ELSE
A = A * 3 + 1
END IF
NEXT I
END SUB
```

94.Write a sub procedure to generate 7,22,11,34……10th terms.

```
DECLARE SUB SERIES ( )
CLS
CALL SERIES
END

SUB SERIES
A = 7
FOR I = 1 TO 10
PRINT A;
IF A MOD 2 = 0 THEN
A = A \ 2
ELSE
A = A * 3 + 1
END IF
NEXT I
END SUB
```

95.Write a sub procedure to generate 22,11,34,17,52,26,13,40,20,10

```
DECLARE SUB SERIES ( )
CLS
CALL SERIES
END

SUB SERIES
A = 22
FOR I = 1 TO 10
PRINT A;
IF A MOD 2 = 0 THEN
A = A \ 2
ELSE
A = A * 3 + 1
END IF
NEXT I
END SUB
```

96.Write a program to print the following series by using SUB ……END SUB: 1, 4, 9, 16.....upto 10th term.

```
DECLARE SUB SERIES ()
CLS
CALL SERIES
END

SUB SERIES
FOR I = 1 TO 9
PRINT I ^ 2
NEXT I
END SUB
```

97.Write a program to print 1, 8, 27, 64.....upto 10th term.

```
DECLARE SUB SERIES ( )
CLS
CALL SERIES
END

SUB SERIES
FOR I = 1 TO 9
PRINT I ^ 3
NEXT I
 END SUB
```

98.Write a display the following series: 999, 728, 511.....upto 10th term.

```
 DECLARE SUB SERIES ( )
CLS
 CALL SERIES
END
 SUB SERIES
 a = 999
 b = 271
 c = 54
 FOR i = 1 TO 10
    PRINT a
    a = a - b
    b = b - c
    c = c - 6
 NEXT i
 END SUB
```

99.Write a program to display 315, 270, 215, 150 ..... upto 10th term.

```
 DECLARE SUB SERIES ( )
CLS
 CALL SERIES
END
 SUB SERIES
 a = 315
 b = 45
 FOR i = 1 TO 10
    PRINT a
    a = a - b
    b = b + 10
 NEXT i
 END SUB
```

100.Write a program to display 5, 10, 20, 35, 55.....upto 10th term.

```
DECLARE SUB DISP( )
CLS
CALL DISP
END
SUB DISP ()
A = 5
B = 5
FOR I = 1 TO 10
   PRINT A
   A = A + B
   B = B + 5
NEXT I
END SUB
```

101.Write a program to print the following series 2, 8, 18, 32, 10th terms using SUB …… END SUB

```
DECLARE SUB DISP( )
CLS
CALL DISP
END
SUB DISP ( )
A = 2
B = 6
FOR I = 1 TO 10
   PRINT A
   A = A + B
   B = B + 4
NEXT I
END SUB
```

102.Write a program to display 2 , 4, 8, 14, 22 …upto 10th terms

```
DECLARE SUB DISP( )
CLS
CALL DISP
END
SUB DISP ( )
A = 2
B = 2
FOR I = 1 TO 10
   PRINT A
   A = A + B
   B = B + 2
NEXT I
END SUB
```

103.Write a program to display 2, 4, 7, 11, 16 up to 10th terms.

```
DECLARE SUB DISP( )
CLS
CALL DISP
END
SUB DISP ( )
A = 2
B = 2
FOR I = 1 TO 10
   PRINT A
   A = A + B
   B = B + 1
NEXT I
END SUB
```

104.Write a program to display 2,6,12,20,30 …..up to 10th term

```
DECLARE SUB DISP( )
CLS
CALL DISP
END
SUB DISP ( )
A = 2
B = 4
FOR I = 1 TO 10
   PRINT A
   A = A + B
   B = B + 2
NEXT I
END SUB
```

105.Write a program to display 0,1, 3, 6, 10, 15 up to 20th terms.

```
DECLARE SUB DISP( )
CLS
CALL DISP
END
SUB DISP ( )
A = 0
B = 1
FOR I = 1 TO 20
   PRINT A
   A = A + B
   B = B + 1
NEXT I
END SUB
```

106.Write a program to display 1, 2, 4, 7, 11 up to 10th term.

```
DECLARE SUB DISP( )
CLS
CALL DISP
END
SUB DISP ( )
A = 1
B = 1
FOR I = 1 TO 10
   PRINT A
   A = A + B
   B = B + 1
NEXT I
END SUB
```

107.Write a program display : 2, 8, 18, 32.....upto 10 terms.

```
DECLARE SUB DISP( )
CLS
CALL DISP
END
SUB DISP ( )
FOR I = 1 TO 10
   PRINT I ^ 2 * 2
NEXT I
END SUB
```

108.Write a program to display 1,2,3,5,8……13th terms.

```
DECLARE SUB SERIES ( )
CLS
CALL SERIES
END

SUB SERIES ( )
A = 1
B = 2
FOR I = 1 TO 13
PRINT A;
C = A + B
A = B
B = C
NEXT I
END SUB
```

109.Write a program to display 5, 10, 15,25 ,40 ,65 , 105 ..... up to10th term

```
DECLARE SUB SERIES ( )
CLS
CALL SERIES
END

SUB SERIES ( )
A = 25
B = 40
FOR I = 1 TO 10
PRINT A;
C = A + B
A = B
B = C
NEXT I
END SUB
```

110.Write a program to **display: 1, 0, 1, 1, 2, 3..... upto 10th term.**

```
DECLARE SUB SERIES ( )
CLS
CALL SERIES
END

SUB SERIES ( )
A = 1
B = 0
FOR I = 1 TO 5
PRINT A;
PRINT B;
A = A + B
B = A + B
NEXT I
END SUB
```

111.Write a program to **generate 3, 3, 6, 9, 15, 24, 39, 63, 102, 165 .**

```
DECLARE SUB SERIES ( )
CALL SERIES
END
SUB SERIES ( )
A = 3
B = 3
FOR I = 1 TO 10
PRINT A;
C = A + B
A = B
B = C
NEXT I
END SUB
```

112.Write a program to **generate series 2, 2,4,6,10,16,……..10th terms**

```
DECLARE SUB SERIES ( )
CALL SERIES
END
SUB SERIES ( )
A = 2
B = 2
FOR I = 1 TO 10
PRINT A;
C = A + B
A = B
B = C
NEXT I
END SUB
```

113.Write a to generate the series: 81, 64, 49, ...1

```
DECLARE SUB SERIES ( )
CLS
CALL SERIES
END
SUB SERIES ( )
FOR I = 9 TO 1
PRINT I ^ 2
NEXT I
END SUB
```

114.Write a sub program to display numbers 2, 4, 6, ...20.

```
DECLARE SUB SERIES ( )
CLS
CALL SERIES
END
SUB SERIES
FOR I = 2 TO 20
PRINT I
NEXT I
END SUB
```

115.Write a sub program to display numbers 100, 90, 80, ...10

```
DECLARE SUB SERIES ( )
CLS
CALL SERIES
END
SUB SERIES
FOR I = 100 TO 80 STEP-10
PRINT I
NEXT I
END SUB
```

116.Write a program to print the following serial 9, 7, 5,……1

```
DECLARE SUB SERIES ( )
CLS
CALL SERIES
END
SUB SERIES
FOR I = 9 TO 1 STEP-2
PRINT I
NEXT I
END SUB
```

117.Write a sub program to display product of all numbers from 4 to 8.

```
DECLARE SUB SERIES ( )
CLS
CALL SERIES
END
SUB SERIES
P = 1
FOR I = 4 TO 8
P = P * I
NEXT I
PRINT "PRODUCT OF ALL
NUMBERS FROM 4 TO 8"; P
END SUB
```

118.Write a sub program to print first ten odd numbers. [SLC 2071 S]

```
DECLARE SUB SERIES ( )
CLS
CALL SERIES
END

SUB SERIES
FOR I = 1 TO 10
S = S + I
NEXT I
PRINT "SUM OF FIRST TEN
POSITIVE INTEGERS" ; S
END SUB
```

119.Write a program to print the natural numbers from 1 to 5 using SUB.....END SUB.

```
DECLARE SUB SERIES ( )
CLS
CALL SERIES
END

SUB SERIES
FOR I = 1 TO 5
PRINT I,
NEXT I
END SUB
```

120.Write a QBASIC program to find the sum of square of first 10 integers.

```
DECLARE SUB SERIES ( )
CLS
CALL SERIES
END

SUB SERIES
FOR I = 1 TO 10
S = S + I ^ 2
NEXT I
PRINT "SUM OF SQUARE FIRST 10
INTEGERS=" ; S
END SUB
```

121.Write a sub program to display all even numbers from 2 to 100 also display its sum.

```
DECLARE SUB SERIES ( )
CLS
CALL SERIES
END
SUB SERIES
FOR I = 2 TO 100 STEP 2
PRINT I,
S = S + I
NEXT I
PRINT "SUM OF ALL EVEN
NUMBERS FROM 2 TO 100="; S
END SUB
```

122.Write a sub program to enter 10 different numbers then find out sum of even numbers

```
DECLARE SUB SUM(N())
CLS
FOR I = 1 TO 10
   INPUT "ENTER 10 NUMBERS";
N(I)
NEXT I

CALL SUM(N())
END
SUB SUM (N())
FOR I = 1 TO 10
   IF N(I) MOD 2 = 0 THEN S = S +
N(I)
NEXT I
PRINT "SUM OF EVEN NUMBERS=";
S
END SUB
```

123.Write a sub program using to display first 13 odd numbers.

```
DECLARE SUB SERIES ( )
CLS
CALL SERIES
END

SUB SERIES
A = 1
FOR I = 1 TO 13
PRINT A,
A = A+ 2
NEXT I
END SUB
```

124.Write a sub program using to display first 19 even numbers.

```
DECLARE SUB SERIES ( )
CLS
CALL SERIES
END

SUB SERIES
A = 2
FOR I = 1 TO 19
PRINT A,
A = A+ 2
NEXT I
END SUB
```

125.WAP to print first ten multiples of input number.

```
DECLARE SUB SERIES ( N)
CLS
INPUT "ENTER ANY NUMBER"; N
CALL SERIES (N)
END

SUB SERIES (N)
FOR I = 1 TO 10
PRINT N * I,
NEXT I
END SUB
```

126.Write a program using FUNCTION to get a word from the user and print the word in the reverse order.

```
DECLARE FUNCTION REV$ (S$)
CLS
INPUT "ENTER ANY STRING"; S$
PRINT "REVERSED STRING IS "; REV$(S$)
END

FUNCTION REV$ (S$)
FOR I = LEN(S$) TO 1 STEP -1
B$ = MID$(S$, I, 1)
W$ = W$ + B$
NEXT I
REV$ = W$
END FUNCTION
```

127.Write a program to test whether the input word is palindrome word or not using FUNCTION……END FUNCTION.

```
DECLARE FUNCTION REV$ (S$)
CLS
INPUT "ENTER ANY STRING"; S$
C$ = REV$(S$)
IF S$ = C$ THEN
PRINT  "THE GIVEN STRING IS PALINDROME"
ELSE
PRINT  "THE GIVEN STRING IS NOT PALINDROME"
END IF
END

FUNCTION REV$ (S$)
FOR I = LEN(S$) TO 1 STEP -1
B$ = MID$(S$, I, 1)
W$ = W$ + B$
NEXT I
REV$ = W$
END FUNCTION
```

128.Write a program to print the shortest word among the three different word input by the user using FUNCTION…….END FUNCTION.

```
DECLARE FUNCTION SHRT$( A$, B$, C$)
CLS
INPUT "ENTER FIRST STRING"; A$
INPUT "ENTER SECOND STRING"; B$
INPUT "ENTER THIRD STRING"; C$
PRINT "SHORTEST STRING="; SHRT$( A$, B$, C$)
END
FUNCTION SHRT$( A$, B$, C$)
IF LEN(A$) < LEN(B$) AND LEN(A$) < LEN(C$) THEN
S$ = A$
IF LEN(B$) < LEN(A$) AND LEN(B$) < LEN(C$) THEN
S$ = B$
ELSE
S$ = C$
END IF
SHRT$ = S$
END FUNCTION
```

129.Write a function program to enter any ten strings and display the shortest string.

```
DECLARE FUNCTION SHRT$( A$ )
CLS
INPUT "ENTER FIRST STRING"; A$
PRINT "SHORTEST STRING=";  SHRT$(A$)
END
FUNCTION SHRT$(A$)
FOR I = 2 TO 10
INPUT "ENTER NEXT STRING"; B$
IF LEN(B$) < LEN(A$) THEN A$ = B$
NEXT I
SHRT$ = A$
END FUNCTION
```

130.Write a program using FUNCTION….END FUNCTION to input a string and count the total number of consonants.

```
DECLARE FUNCTION COUNT (S$)
CLS
INPUT "ENTER ANY STRING"; S$
PRINT "TOTAL NO. OF CONSONANTS= "; COUNT(S$)
END
FUNCTION COUNT (S$)
CC = 0
FOR I = 1 TO LEN(S$)
B$ = MID$(S$, I, 1)
C$ = UCASE$(B$)
IF C$ <> "A" AND C$ <> "E" AND C$ <> "I" AND C$ <>
"O" AND C$ <> "U" THEN CC = CC + 1
NEXT I
COUNT = CC
END FUNCTION
```

131.Write a program to find the numbers of vowels in an input string using 'SUB…..END SUB'.

```
DECLARE SUB COUNT (S$)
CLS
INPUT "ENTER ANY STRING"; S$
CALL COUNT(S$)
END

SUB COUNT (S$)
VC = 0
FOR I = 1 TO LEN(S$)
B$ = MID$(S$, I, 1)
C$ = UCASE$(B$)
IF C$ = "A" OR C$ = "E" OR C$ = "I" OR C$ = "O" OR C$ =
"U" THEN VC = VC + 1
NEXT I
PRINT "TOTAL NO. OF VOWELS= "; VC
END SUB
```

132.Write a program using FUNCTION... END FUNCTION to count the number of words in a sentence.

```
DECLARE FUNCTION COUNT (S$)
CLS
INPUT "ENTER ANY STRING"; S$
PRINT "TOTAL NO. OF WORDS= "; COUNT(S$)
END

FUNCTION COUNT (S$)
WC = 1
FOR I = 1 TO LEN(S$)
B$ = MID$(S$, I, 1)
IF B$ = " " THEN WC = WC + 1
NEXT I
COUNT = WC
END FUNCTION
```

133.Write a program to declare SUB procedure to print only the vowels from a given word.

```
DECLARE SUB DISPV (S$)
CLS
INPUT "ENTER ANY STRING"; S$
CALL DISPV(S$)
END

SUB DISPV(S$)
FOR I = 1 TO LEN(S$)
B$ = MID$(S$, I, 1)
C$ = UCASE$(B$)
IF C$ = "A" OR C$ = "E" OR C$ = "I" OR C$ = "O" OR C$
= "U" THEN C$=C$+ B$
END IF
NEXT I
PRINT “VOWELS ONY ARE”; C$
END SUB
```

134.Write a program to input a string then print vowel characters in upper case and consonant characters in lower case using function – end function. (Suppose input string is NEPAL then output should be nEpAl)

```
DECLARE SUB ALT(S$)
CLS
INPUT "ENTER ANY WORD"; S$
CALL ALT(S$)
END

SUB ALT$ (S$)
FOR I = 1 TO LEN(S$)
B$ = MID$(S$, I, 1)
IF I MOD 2 = 1 THEN
W$ = W$ + LCASE$(B$)
ELSE
W$ = W$ + UCASE$(B$)
END IF
NEXT I
PRINT W$
END SUB
```

135.Write a program to enter any word and print alternate case of each character using DECLARE SUB eg. Nepal to NePaL.

```
DECLARE SUB ALT(S$)
CLS
INPUT "ENTER ANY WORD"; S$
CALL ALT(S$)
END

SUB ALT$ (S$)
FOR I = 1 TO LEN(S$)
B$ = MID$(S$, I, 1)
IF I MOD 2 = 1 THEN
W$ = W$ + LCASE$(B$)
ELSE
W$ = W$ + UCASE$(B$)
END IF
NEXT I
PRINT W$
END SUB
```

136.Write a function program to enter a string and then find out the sum of even ASCII value of each characters.

```
DECLARE FUNCTION SUM(A$)
CLS
INPUT "ENTER ANY STRING"; A$
PRINT " SUM OF EVEN ASCII VALUE="; SUM(A$)
END
FUNCTION SUM (A$)
FOR I = 1 TO LEN(A$)
   B$ = MID$(A$, I, 1)
   C = ASC(B$)
   IF C MOD 2 = 0 THEN S = S + C
NEXT I
SUM=S

END FUNCTION
```

137.Write a sub program to input any string and display only consonant by removing vowels.

```
DECLARE FUNCTION DISP$ (S$)
CLS
INPUT "ENTER ANY STRING"; S$
PRINT DISP(S$)
END

FUNCTION DISP$ (S$)
FOR I = 1 TO LEN(S$)
B$ = MID$(S$, I, 1)
C$ = UCASE$(B$)
IF C$ <> "A" AND C$ <> "E" AND C$ <> "I" AND C$ <>
"O" AND C$ <> "U" AND C$ <> " " THEN W$=W$+B$
END IF
NEXT I
DISP$ =  W$
END FUNCTION
```

138.Write a program to enter a long string and display only initial character of each word Using function procedure.

```
DECLARE FUNCTION INIT$(A$)
CLS
INPUT "ENTER ANY STRING"; A$
PRINT INIT$(A$)
END
FUNCTION INIT$ (A$)
C$ = LEFT$(A$, 1)
FOR I = 1 TO LEN(A$)
   B$ = MID$(A$, I, 1)
   IF B$ = " " THEN C$ = C$ + MID$(A$, I + 1, 1)
NEXT I
INIT$ = C$
END FUNCTION
```

139.Write a program using SUB…….END SUB to display:

N
E
P
A
L

```
DECLARE SUB PATTERN (S$)
S$ = "NEPAL"
CALL PATTERN(S$)
END
SUB PATTERN (S$)
FOR I = 1 TO LEN(S$)
PRINT MID$(S$, I, 1)
NEXT I
END SUB
```

140.Write a program to display the following pattern: -

H
KHA
OKHAR
POKHARA

```
DECLARE SUB PATTERN (S$)
S$ = "POKHARA"
CALL PATTERN(S$)
END
SUB PATTERN (S$)
A = 4
FOR I = 1 TO LEN(S$) STEP 2
PRINT TAB(A); MID$(S$, A, I)
A = A - 1
NEXT I
END SUB
```

141.Write a program using SUB.....END SUB to display -

NEPAL
NEPA
NEP
NE
N

```
DECLARE SUB PATTERN (S$)
S$ = "NEPAL"
CALL PATTERN(S$)
END
SUB PATTERN (S$)
FOR I = LEN(S$) TO 1 STEP - 1
PRINT LEFT$(S$, I)
NEXT I
END SUB
```

142.Write a program using SUB…….END SUB to display.

N
NE
NEP
NEPA
NEPAL

```
DECLARE SUB PATTERN (S$)
CLS
S$ = "NEPAL"
CALL PATTERN(S$)
END
SUB PATTERN (S$)
FOR I = 1 TO LEN(S$)
PRINT LEFT$(S$, I)
NEXT I
END SUB
```

143.Write a sub to print the following pattern:

NEPAL
EPAL
PAL
AL
L

```
DECLARE SUB PATTERN (S$)
CLS
S$ = "NEPAL"
CALL PATTERN(S$)
END
SUB PATTERN (S$)
FOR I = LEN(S$) TO 1 STEP - 1
PRINT RIGHT$(S$, I)
NEXT I
END SUB
```

144.Write a SUB procedure to generate given below:

E V E R E S T
V E R E S
E R E
R

```
DECLARE SUB PATTERN (S$)
S$ = "EVEREST"
CALL PATTERN(S$)
END
SUB PATTERN (S$)
A = 1
FOR I = LEN(S$) TO 1 STEP -2
PRINT TAB(A); MID$(S$, A, I)
A = A + 1
NEXT I
END SUB
```

145.Print following pattern

*****
****
****
****

```
DECLARE SUB PATTERN (S$)
CLS
S$ = "*******"
CALL PATTERN(S$)
END
SUB PATTERN (S$)
FOR I = 1 TO LEN(S$) STEP 2
PRINT LEFT$(S$, I)
NEXT I
END SUB
```

146.Write a program to store Roll no., Name, Class and Address of any five students. [SEE 2074]

```
OPEN "Student.dat" FOR OUTPUT AS #1
FOR I = 1 TO 5
INPUT "Enter Roll No."; r
INPUT "Enter Name"; n$
INPUT "Enter Class"; c
INPUT "Enter Address"; a$
WRITE #1, r, n$, c, a$
NEXT I
CLOSE #1
END
```

147.A sequential data file called "student.dat" contains same records under the field's name, english, nepali and computer. Write a program to add some more records in the same sequential data file. [SLC 2068]

```
OPEN "student.dat" FOR APPEND AS #1
DO
CLS
INPUT "ENTER NAME"; N$
INPUT "ENTER MARKS IN ENGLISH"; E
INPUT "ENTER MARKS IN NEPALI"; N
INPUT "ENTER MARKS IN COMPUTER"; C
WRITE #1, N$, E, N, C
INPUT "DO YOU WANT TO CONTINUE"; CH$
LOOP WHILE UCASE$(CH$) = "Y"
CLOSE #1
END
```

148.A sequential data file "RECORD.DAT" and store Name, Address and Salary of employees. WAP to add some more records in the data file "RECODR.DAT". Program should terminate with user choice.

```
OPEN "RECORD.DAT" FOR APPEND AS #1
DO
CLS
INPUT "ENTER NAME"; N$
INPUT "ENTER MARKS IN ENGLISH"; E
INPUT "ENTER MARKS IN NEPALI"; N
INPUT "ENTER MARKS IN COMPUTER"; C
WRITE #1, N$, E, N, C
INPUT "DO YOU WANT TO CONTINUE"; CH$
LOOP WHILE UCASE$(CH$) = "Y"
CLOSE #1
END
```

149.Create a data file to store the records of few employees having Name, Address, Post, Gender and Salary fields. [SEE 2073]

```
OPEN "std.rec" FOR OUTPUT AS #1
TOP:
CLS
INPUT "Enter Name"; N$
INPUT "Enter Address"; A$
INPUT "Enter Post"; P$
INPUT "Enter gender"; G$
INPUT "Enter Salary"; S
WRITE #1, N$, A$, P$, G$, S
INPUT "Do you want to continue"; CH$
IF UCASE$(CH$)="Y" THEN GOTO TOP
CLOSE #1
END
```

150.Create a sequential data file 'Price.dat' to store item name, quantity and Rate also calculate total amount(total=Quantity X Rate).Program should terminate according to the user's choice.

```
OPEN "price.dat" FOR OUTPUT AS #1
TOP:
CLS
INPUT "Enter Item Name"; N$
INPUT "Enter Quantity"; Q
INPUT "Enter Rate"; R
T = Q * R
WRITE #1, N$, Q, R, T
INPUT "Do you want to continue"; CH$
IF CH$="Y" OR CH$ = "y" THEN GOTO TOP
CLOSE #1
END
```

151.Create a sequential data file'post.dat' to store name and marks of any three subjects also calculate total and percentages only for 15 students.

```
OPEN "post.dat" FOR OUTPUT AS #1
FOR I = 1 TO 15
INPUT "Enter Name"; n$
INPUT "Enter marks in any three subjects"; A, B, C
T = A + B + C
P = T / 3
WRITE #1, n$, A, B, C, T, P
NEXT I
CLOSE #1
END
```

152.Store SIDNO, name, address and Telephone number of five students and display the records on monitor in sequential data file "STDINFO"

```
OPEN "STDINFO.DAT" FOR OUTPUT AS #1
FOR I = 1 TO 5
    INPUT "ENTER NAME"; N$
   INPUT "ENTER ADDRESS"; A$
   INPUT "ENTER TELEPHONE"; T#
   WRITE #1, N$, A$, T#
NEXT I
CLOSE #1
OPEN "STDINFO.DAT" FOR INPUT AS #1
CLS
FOR I = 1 TO 5
   INPUT #1, N$, A$, T#
   PRINT N$, A$, T#
NEXT I
CLOSE #1
END
```

153.A sequential data file "Address.inf" contains serial no, name, address, telephone and email_id.WAP to record as many records as the user wants. The serial number should be generated automatically like 5001,5003,5005.

```
OPEN " Address.inf " FOR OUTPUT AS #1
DO
CLS
C = 5001
INPUT "ENTER NAME"; N$
INPUT "ENTER ADDRESS"; A$
INPUT "ENTER TELEPHONE"; T#
INPUT "ENTER EMAIL"; E$
   WRITE #1, C, N$, A$, T$, E$
C = C + 2
INPUT "DO YOU WANT TO CONTINUE (Y / N)"; CH$
LOOP WHILE UCASE$(CH$) = "Y"
CLOSE #1
END
```

154.A Sequential data file called "SEE.DAT" has stored data under the field heading Symbol No., Name, English, Nepali, and Computer. Write a program to display all the information of those students whose marks in Computer is more than 80.

```
OPEN "SEE.DAT" FOR INPUT AS #1
CLS
WHILE NOT EOF (1)
   INPUT #1, A, B$, C, D, E
   IF E > 80 THEN PRINT A, B$, C, D, E
WEND
CLOSE #1
END
```

155.A sequential data file "STD.TXT" contains name and marks in three different subjects of some students. Write a program to display only fail student's records assuming pass marks 40.

```
OPEN "STD.TXT" FOR INPUT AS #1
CLS
WHILE NOT EOF (1)
   INPUT #1, B$, C, D, E
   IF C < 40 AND D <40 AND E <40 THEN PRINT B$, C, D, E
WEND
CLOSE #1
END
```

156.Write a program which reads records from the file "Result.DAT" having the fields name, and marks of three different subjects and display only those records whose percentage is greater than 60 and less than 80. Also count the total number of records presenting in that data files.

```
OPEN "STD.TXT" FOR INPUT AS #1
CLS
WHILE NOT EOF (1)
   INPUT #1, B$, C, D, E
A=A+1
T=C+D+E
P=T/3
   IF P > 60 AND P < 80 THEN  PRINT B$, C, D, E
WEND
PRINT "TOTAL NO. OF RECORDS="; A
CLOSE #1
END
```

157.Write a program to read all the records from the data file "STUDENT.TXT" and display all the records where the fields name are unknown.

```
OPEN "STUDENT.TXT" FOR INPUT AS #1
CLS
WHILE NOT EOF (1)
  LINE INPUT #1, A$
   PRINT A$
WEND
CLOSE #1
END
```

158.A data file "pabson.txt" contains the records composed of the fields like school, principal, address, contact. Write a program in Qbasic to display records of the schools located in either Kathmandu or Palpa

```
OPEN "PABSON.TXT" FOR INPUT AS #1
CLS
WHILE NOT EOF (1)
  INPUT #1, A$, B$, C$, D
   IF UCASE$(C$) = "KATHMANDU" OR UCASE$(C$) =
"PALPA" THEN PRINT A$, B$, C$, D
WEND
CLOSE #1
END
```

159.A data file "INFO.DAT" has numerous records in it with name, address age, and telephone numbers in it. Write a program to read all the records and print those with address "NEPAL" and age >15

```
OPEN "INFO.DAT" FOR INPUT AS #1
CLS
WHILE NOT EOF (1)
  INPUT #1, A$, B$, C, D
   IF UCASE$(B$) = "NEPAL" AND C >15 THEN PRINT A$, B$,
C, D
WEND
CLOSE #1
END
```

160.A sequential data file called 'ADDRESS.DAT' contains NAME, AGE, CITY and TELEPHONE fields. Write a program to display all the contents of that data file.

```
OPEN "ADDRESS.DAT" FOR INPUT AS #1
CLS
WHILE NOT EOF (1)
  INPUT #1, A$, B, C$, D
   PRINT A$, B, C$, D
WEND
CLOSE #1
END
```

161.A data file "lib.txt" consists of book's name, author's name and price of books. Write a program to count and display the total number of records present in the file.

```
OPEN "LIB.TXT" FOR INPUT AS #1
CLS
WHILE NOT EOF (1)
  INPUT #1, A$, B$, C
D = D + 1
WEND
PRINT "TOTAL NUMBER OF RECORDS="; D
CLOSE #1
END
```

162.Write a program in QBASIC to open a sequential data file "EMP.DAT", which contains employees records: Name, address and phone number and display all the records as well as total number of records stored in the file.

```
OPEN "LIB.TXT" FOR INPUT AS #1
CLS
WHILE NOT EOF (1)
  INPUT #1, A$, B$, C
PRINT A$, B$, C
D = D + 1
WEND
PRINT "TOTAL NUMBER OF RECORDS="; D
CLOSE #1
END
```

163.A sequential data file named "nabil.txt" contains record of clients of a bank including depositor's name, deposited amount, time and rate of interest. Wap to display detail of all depositors including simple interest.

```
OPEN "NABIL.TXT" FOR INPUT AS #1
CLS
WHILE NOT EOF (1)
  INPUT #1, N$, P, T, R
I=P*T*R/100
PRINT A$, B$, C, I
WEND
CLOSE #1
END
```

164.A sequential data file "SALARY.DAT" contains the information, Employee-Code, Employee-Name, Post, Basic-Salary. Write a program to display those records whose Basic-salary is between 10000 to 15000 and Post is 'OFFICER'.

```
OPEN "SALARY.DAT" FOR INPUT AS #1
CLS
WHILE NOT EOF (1)
  INPUT #1, E,, N$, P$, S
    IF UCASE$(P$) = "OFFICER" AND S >= 10000 AND S>= 15000
THEN PRINT A$, B$, C, D
WEND
CLOSE #1
END
```

165.A data file name "EMP.DAT", contains number of records having fields name, post and salary. Write a program to count total number of "Manager" in the data file. (hint: Manager is a post)

```
OPEN "EMP.DAT" FOR INPUT AS #1
CLS
WHILE NOT EOF (1)
  INPUT #1, N$, P$, S
    IF UCASE$(P$) = "MANAGER" THEN PRINT C = C + 1
WEND
PRINT "TOTAL NO.OF MANAGERS ARE"; C
CLOSE #1
END
```

166.A sequential data file "emp.dat" contains name, post and salary fields of information about employees. Write a program to display all the information of employees along with tax amount (also tax is 15% of salary).

```
OPEN "EMP.DAT" FOR INPUT AS #1
CLS
WHILE NOT EOF (1)
  INPUT #1, N$, P$, S
    T = 15 / 100 * S
PRINT N$, P$, S, T
WEND
CLOSE #1
END
```

167.A data file "Salary.Dat" contains the information of employee regarding their name, post and salary. Write a program to display all the information of employee whose salary is greater than 15000 and less than 40000.

```
OPEN "EMP.DAT" FOR INPUT AS #1
CLS
WHILE NOT EOF (1)
  INPUT #1, N$, P$, S
    IF S >= 15000 AND S <= 40000 THEN PRINT N$, P$, S
WEND
CLOSE #1
END
```

168.Write a program that reads the "INFO.DAT" file that has several record such as name, address, gender, post, and salary .The program display those record whose sex is male and salary more than 10,000 and also the program counts the total number of records in that file.

```
OPEN "INFO.DAT" FOR INPUT AS #1
CLS
WHILE NOT EOF (1)
  INPUT #1, N$, A$, G$, P$, S
C = C + 1
IF UCASE$(G$)="M" AND S >= 10000 THEN PRINT N$, A$, G$,
P$, S
WEND
PRINT "TOTAL NUMBER OF RECORDS="; C
CLOSE #1
END
```

169.A sequential data file'post.dat' has few records related to name, address, salary.WAP to display the records whose address begins with 'S' or 'D'

```
OPEN "POST.DAT" FOR INPUT AS #1
CLS
WHILE NOT EOF (1)
  INPUT #1, N$, P$, S
A$ = UCASE$(LEFT$(N$,1))
IF A$ = "S" OR A$ = "D" THEN PRINT N$, P$, S
WEND
CLOSE #1
END
```

170.Write a program to open a data file "record.dat" that contains name, address, date of birth, email and telephone number of some employees. Now display all those records whose date of birth is in current month.

```
OPEN "birth.dat" FOR INPUT AS #1
CLS
WHILE NOT EOF(1)
   INPUT #1, n$, d$, a$
   b$ = LEFT$(DATE$, 2)
   c = VAL(b$)
   e$ = LEFT$(d$, 2)
   f = VAL(e$)
   IF c = f THEN PRINT n$, d$, a$
WEND
CLOSE #1
END
```

171.A sequential data file "Record.dat" has few records related to name, address, post and DOB(mm/dd/yyyy). WAP to display the records of all those who were born between 1971 to 1999.

```
OPEN "RECORD.dat" FOR INPUT AS #1
CLS
WHILE NOT EOF(1)
   INPUT #1, n$, a$, p$, d$
   d$ = RIGHT$(d$, 4)
   c = VAL(b$)
      IF c >= 1971 and c<=1999 THEN PRINT n$, d$, a$
WEND
CLOSE #1
END
```

172.Write a Qbasic program that read the "EMP.DAT" file with Name, Address, Post and Salary columns from E: drive that has 500 records of employees and displays only its last 50 records.

```
OPEN "E:\EMP.DAT" FOR INPUT AS #1
CLS
FOR i = 1 TO 500
   INPUT #1, n$, a$, p$, s
   IF i >= 450 AND i <= 500 THEN PRINT n$, a$, p$, s
NEXT i
CLOSE #1
END
```

173.A sequential data file has 100 records having field name, class and roll number. Write a program to display from 50th to 60th records.

```
OPEN "ABC.DAT" FOR INPUT AS #1
CLS
WHILE NOT EOF (1)
  INPUT #1, N$, C, R
D = D + 1
IF D >= 50 AND D <= 60 THEN PRINT N$, C, R
WEND
CLOSE #1
END
```

174.Write a program to display the first 10 records from a file named "resource.dat" having fields name, phone and email.

```
OPEN "RESOURCE.DAT" FOR INPUT AS #1
CLS
FOR I = 1 TO 10
  INPUT #1, N$, C, R
PRINT N$, C, R
NEXT I
CLOSE #1
END
```

175.A data file named "EMP.DAT" contains some records with the fields Code, Name, Post and Salary. Write a program to print odd position records of the data file.

```
OPEN "EMP.DAT" FOR INPUT AS #1
CLS
WHILE NOT EOF (1)
  INPUT #1, C, N$, P$, S
D = D + 1
IF MOD 2 = 1 THEN PRINT C, N$, P$, S
WEND
CLOSE #1
END
```

176.A sequential data file named "abc.dat" has several records having fields name, roll and class. Write a program to copy all the records of class 10 into a newly created file new.dat.

```
OPEN "ABC.DAT" FOR INPUT AS #1
OPEN "NEW.DAT" FOR OUTPUT AS #1
CLS
WHILE NOT EOF (1)
  INPUT #1, N$, R, C
IF C = 10 THEN WRITE #2, N$, R, C
WEND
CLOSE #1, #2
END
```

177.A data file named "record.dat" contains name, age and salary for n number of persons. Write a program to input a name to search data from a data file. If the data is not found, then display the message "Data not found in the list".

```
OPEN "RECORD.DAT" FOR INPUT AS #1
CLS
INPUT "Enter name to be searched"; S$
FLAG=0
WHILE NOT EOF(1)
INPUT #1, N$, A$, S
IF UCASE$(S$)=UCASE$(N$) THEN
PRINT N$, A$, S
FLAG=1
END IF
WEND
IF FLAG=0 THEN PRINT "Data not found"
CLOSE #1
END
```

178.A sequential data file 'Student.dat' contains registration number, student name, address and date of birth of some students. Write a program that asks a user to input a registration number and displays the record of the particular registration if present.

```
OPEN "STUDENT.DAT" FOR INPUT AS #1
CLS
INPUT "Enter registration no. to be searched"; S
FLAG=0
WHILE NOT EOF(1)
INPUT #1, R, N$, A$, D$
IF S = R THEN
PRINT R, N$, A$, D$
FLAG=1
END IF
WEND
IF FLAG=0 THEN PRINT "Data not found"
CLOSE #1
END
```

179.WAP that asks a post of the employee and displays his/her records from the sequential data file "XYZ.REC" having fields Name, Post, Dept and Salary.

```
OPEN "XYZ.REC" FOR INPUT AS #1
CLS
INPUT "Enter post to be searched"; S$
FLAG=0
WHILE NOT EOF(1)
INPUT #1, N$, P$, D$, S
IF UCASE$(S$)=UCASE$(P$) THEN
PRINT N$, P$, D$, S
FLAG=1
END IF
WEND
IF FLAG=0 THEN PRINT "Data not found"
CLOSE #1
END
```

180.Delete some records from "neps.dat" file where computer ask user to enter the record, which is to be deleted. (Fields are name, address, and telephone number)

```
OPEN "NEPS.DAT" FOR INPUT AS #1
OPEN "TEMP.DAT" FOR OUTPUT AS #1
CLS
INPUT "Enter name which is to be deleted"; D$
WHILE NOT EOF(1)
INPUT #1, N$, A$, T#
IF UCASE$(D$)<>UCASE$(N$) THEN
WRITE #2, N$, A$, T#
ELSE
PRINT "Deleted data="; N$, A$, T#
END IF
WEND
CLOSE #1, #2
 KILL "NEPS.DAT"
NAME "TEMP.DAT" AS "NEPS.DAT"
END
```

182.A sequential data file "marks.dat" contains information such as student's name, marks obtained in math, science and computer. Write a program that increase the marks of computer by 10 of those student who secured less than 40

```
OPEN "D:\PATIENT.DAT" FOR INPUT AS #1
OPEN "d:\TEMP.DAT" FOR OUTPUT AS #2
CLS
FLAG = 0
WHILE NOT EOF(1)
   INPUT #1, N$, A, B, C
   IF C > 40 THEN
      WRITE #2, N$, A, B, C
   ELSE
      C = C + 10
      WRITE #2, N$, A, B, C
      FLAG = 1
   END IF
WEND
IF FLAG = 0 THEN
   PRINT "DATA NOT FOUND"
ELSE
   PRINT "DATA EDITED"
END IF
CLOSE
KILL "D:\PATIENT.DAT"
NAME "D:\TEMP.DAT" AS "D:\PATIENT.DAT"
END
```

181.A sequential data file "RECORD.DAT" contains different records under fields: name rollno., name, address and percentage. Write a program to edit a record and display both edited and unedited records on the screen to compare them side by side.

```
OPEN "D:\RECORD" FOR INPUT AS #1
OPEN "d:\TEMP.DAT" FOR OUTPUT AS #2
CLS
INPUT "ENTER ROLL NUMBER TO EDIT DATA"; E
FLAG = 0
WHILE NOT EOF(1)
INPUT #1, R, N$, A$, P
IF E <> R THEN
WRITE #2, R, N$, A$, P
ELSE
INPUT "ENTER ROLL NUMBER"; ER
INPUT "ENTER NAME"; EN$
INPUT "ENTER ADDRESS"; EA$
INPUT "ENTER PERCENTAGE"; EP
WRITE #2, ER, EN$, EA$, EP
FLAG = 1
END IF
WEND
IF FLAG = 0 THEN
PRINT "DATA NOT FOUND"
ELSE
PRINT "NON EDITED DATA"
PRINT "ROLL NUMBER= "; R
PRINT "NAME= "; N$
PRINT "ADDRESS= "; A$
PRINT "PERCENTAGE= "; P
PRINT "---------------"
PRINT "EDITED DATA"
PRINT "ROLL NUMBER: "; ER
PRINT "NAME: "; EN$
PRINT "ADDRESS: "; EA$
PRINT "PERCENTAGE: "; EP
END IF
CLOSE
KILL "D:\SALARY.DAT"
NAME "D:\TEMP.DAT" AS "D:\SALARY.DAT"
END
```