ALGORITHM

**1)**Start

**2**) Define a class ‘periodic’ with private elements i, j, k, a, c.

**3)**Declare 5 member functions showtable(),sblock(),pblock(),dblock() and fblock() in the class.

**4)** Define structure ‘quiz ‘with data members char ques[100],ans[100] and

declare 2 objects of the structure a and b.

**5) ALGORITHM FOR FUNCTION QUIZGEN()**

1)Start

2) Link the filestream object f with “quiz.dat”

3)Write the object a into the binary file

4)Stop

**6) ALGORITHM FOR FUNCTION QUIZDISP()**

1)Start

2) Link the filestream object f with “quiz.dat”

3)Write the object b into the binary file

4)Stop

**7) ALGORITHM FOR MEMBER FUNCTION SHOWTABLE()**

1)Start

2) Display the table using line function

3)Display the element symbol along with their atomic number using outtextxy() function

4)Stop

**8) ALGORITHM FOR MEMBER FUNCTION SBLOCK()**

1)Start

2) Display the table(s block) using line function

3)Display the element symbol using outtextxy() function

4)Stop

**9) ALGORITHM FOR MEMBER FUNCTION PBLOCK()**

1)Start

2) Display the table(p block) using line function

3)Display the element symbol using outtextxy() function

4)Stop

**10) ALGORITHM FOR MEMBER FUNCTION DBLOCK()**

1)Start

2) Display the table(d block) using line function

3)Display the element symbol using outtextxy() function

4)Stop

**11) ALGORITHM FOR MEMBER FUNCTION FBLOCK()**

1)Start

2) Display the table(f block) using line function

3)Display the element symbol using outtextxy() function

4)Stop

**12) ALGORITHM FOR FUNCTION FN2()**

1)Start

2) Read in choice ct from the user for displaying one of the blocks

3)Call the appropriate fuction according to ct

4)Stop

**13) ALGORITHM FOR FUNCTION FN3() Parameters-(char a[])**

1)Start

2) Link the filestream object f with the textfile “periodic”

3)Concatenate a with string r using strcat() fuction

4)Open while loop

5)Read in the string from the textfile “periodic” until delimiter ‘\*’ using getline function

6)Compare r and s using strcmpi function and if they are same display the entire details of that element

7)Close while loop

8)Stop

**14) ALGORITHM FOR FUNCTION FN4a() Parameters-(char a[],char b[],char c[])**

1)Start

2) Link the filestream object f with the textfile “periodic”

3)Concatenate a with string r using strcat() fuction

4)Open while loop

5)Read in the string from the textfile “periodic” until delimiter ‘\*’ using getline function

6)Check if r and s are the same using strcmpi function

7)Extract the atomic masses of the elements from the textfile and store them as a1,b1 and c1

8)Display the element name along with their atomic mass

9)Convert the strings a1,b1,c1 into corresponding numerical value

10)Compare the order of atomic masses and display in ascending order

11)Stop

**15) ALGORITHM FOR FUNCTION FN4b() Parameters-(char a[],char b[],char c[])**

1)Start

2) Link the filestream object f with the textfile “periodic”

3)Concatenate a with string r using strcat() fuction

4)Open while loop

5)Read in the string from the textfile “periodic” until delimiter ‘\*’ using getline function

6)Check if r and s are the same using strcmpi function

7)Extract the boiling points of the elements from the textfile and store them as a1,b1 and c1

8)Display the element name along with their boiling point

9)Convert the strings a1,b1,c1 into corresponding numerical value

10)Compare the order of boiling point and display in ascending order

11)Stop

**16) ALGORITHM FOR FUNCTION FN4c() Parameters-(char a[],char b[],char c[])**

1)Start

2) Link the filestream object f with the textfile “periodic”

3)Concatenate a with string r using strcat() fuction

4)Open while loop

5)Read in the string from the textfile “periodic” until delimiter ‘\*’ using getline function

6)Check if r and s are the same using strcmpi function

7)Extract the melting points of the elements from the textfile and store them as a1,b1 and c1

8)Display the element name along with their melting point

9)Convert the strings a1,b1,c1 into corresponding numerical value

10)Compare the order of melting point and display in ascending order

11)Stop

**17) ALGORITHM FOR FUNCTION FN4d() Parameters-(char a[],char b[],char c[])**

1)Start

2) Link the filestream object f with the textfile “elec”

3)Concatenate a with string r using strcat() fuction

4)Open while loop

5)Read in the string from the textfile “periodic” until delimiter ‘\*’ using getline function

6)Check if r and s are the same using strcmpi function

7)Extract the electronegativity of the elements from the textfile and store them as a1,b1 and c1

8)Display the element name along with their electronegativity

9)Convert the strings a1,b1,c1 into corresponding numerical value

10)Compare the order of electronegativity and display in ascending order

11)Stop

**18) ALGORITHM FOR FUNCTION FN4e() Parameters-(char a[],char b[],char c[])**

1)Start

2) Link the filestream object f with the textfile “ion”

3)Concatenate a with string r using strcat() fuction

4)Open while loop

5)Read in the string from the textfile “periodic” until delimiter ‘\*’ using getline function

6)Check if r and s are the same using strcmpi function

7)Extract the ionization enthalpy of the elements from the textfile and store them as a1,b1 and c1

8)Display the element name along with their ionization enthalpy

9)Convert the strings a1,b1,c1 into corresponding numerical value

10)Compare the order of ionization enthalpy and display in ascending order

11)Stop

**19) ALGORITHM FOR FUNCTION FN5()**

1)Start

2) Copy the question and answer onto a.ques and a.ans respectively

3)Call the quizgen() function and quizdisp() function after every question

4)Stop

**20) ALGORITHM FOR void main()**

1)Start

2) Display “Periodic Table” with the help of outtextxy() function and settextstyle() function

3)Display the options and read in the choice from the user

4)Call the appropriate function according to the choice

5)stop

**21)**Stop