From	To	Formulae
Formulae Conversion Factors 9/5 = 1.8 9/4 = 2.25 10/8 = 1.25		
Celsius	Fahrenheit	F = C × 1.8 + 32
	Kelvin	K = C + 273.15
	Rankine	Ra = C × 1.8 + 32 + 459.67
	Réaumur	Re = C × 0.8
Fahrenheit	Celsius	C = (F - 32) / 1.8
	Kelvin	K = (F + 459.67) / 1.8
	Rankine	Ra = F + 459.67
	Réaumur	Re = (F - 32) / 2.25
Kelvin	Celsius	C = K - 273.15
	Fahrenheit	F = K × 1.8 - 459.67
	Rankine	Ra = K × 1.8
	Réaumur	R = (K - 273.15) × 0.8
Rankine	Celsius	C = (Ra - 32 - 459.67) / 1.8
	Fahrenheit	F = Ra - 459.67
	Kelvin	K = Ra / 1.8
	Réaumur	Re = (Ra - 32 - 459.67) / 2.25
Réaumur	Celsius	C = Re × 1.25
	Fahrenheit	F = Re × 2.25 + 32
	Kelvin	K = Re × 1.25 + 273.15
	Rankine	Ra = Re × 2.25 + 32 + 459.67

```c
#include <windows.h> //use for gotoxy
#include <conio.h> //header file of getch
#include <stdio.h> //use for input/output
#include <stdlib.h> // for standard libraries (use in coditional statements(if-else and etc...)) system("cls")
#include <time.h>  //use for delay
#include <string.h> //use for strcmp


//GLOBAL function---> any method in this program can use this functions
void delay(ms){
    clock_t timeDelay = ms + clock();    //Step up the difference from clock delay
    while (timeDelay > clock());         //stop when the clock is higher than time delay
}


void gotoxy(short x,short y)
{
    COORD pos={x,y};
    SetConsoleCursorPosition(GetStdHandle(STD_OUTPUT_HANDLE),pos);
}

        //GLOBAL VARIABLES---> these variables can be used by any methods
            int z,r,from,to;
            char username[10],password[10];
            float C,F,K,Ra,Re;


//MAIN METHOD--> this will call the initial method and goes on
int main(){

    //variables are in the GLOBAL VARIABLE
    system("COLOR 0B"); //change the background and font of the system
    printf("!PASSWORD LENGTH IS 10 CHARACTERS ONLY\n");

    while(z<3){
            printf("\nE N T E R  U S E R N A M E: "), scanf("%s", &username);
            printf("E N T E R  P A S S W O R D: ");
                for(r=0;r<10;r++){ //10 max char of pass
                    password[r]=getch(); //acts as scanf for the password to store in the array [password]
                    printf("*");
                }
                password[r]='\0';



            //getch function prompts a user to press a character and that character isn't printed on screen.

                    //system_username=yestouno-----------> system_password=papasakami
```

```
                    if(strcmp(username,"yestouno")==0 && strcmp(password,"papasakami")==0){
                        printf("\n\nUSERNAME AND PASSWORD ARE CORRECT");
                        delay(2000),system("cls");
                        conversion_table(); //conversion_table calling
                    }


            else{
            z++;
            printf("\n\nEither username or password is incorrect\n");
            delay(500), system("cls");
            printf("You have %d trials left\n", 3-z);
            }
                if(z==3){
                    printf("You've reached the maximum number of attempts.\n");
                    exit(EXIT_SUCCESS);

                }
        }
}


/*=============================================================================================================*/
//conversion_table method
int conversion_table()
{

    //VERTICALS OUTER
    for(r=1;r<=33;r++){
        delay(5);
        gotoxy(10,r),printf("*");
        gotoxy(75,r),printf("*");
    }
        //VERTICALS INNER
        for(r=1;r<=30;r++){
            delay(5);
            gotoxy(25,r),printf("*");
            gotoxy(40,r),printf("*");
        }


    //HORIZONTALS
    for(r=1;r<=65;r++){
        delay(5);
        gotoxy(10+r,1),printf("*");
        gotoxy(10+r,3),printf("*");
        gotoxy(10+r,5),printf("*");
        gotoxy(10+r,10),printf("*");
```

```
        gotoxy(10+r,15),printf("*");
        gotoxy(10+r,20),printf("*");
        gotoxy(10+r,25),printf("*");
                gotoxy(10+r,30),printf("*");
                gotoxy(10+r,33),printf("*");

           }

                //HEADERS
                delay(5),gotoxy(25,2),printf("WELCOME TEMPERATURE CONVERTER");
                delay(5),gotoxy(15,4),printf("FROM");
                delay(5),gotoxy(32,4),printf("TO");
                delay(5),gotoxy(53,4),printf("FORMULAE");

                    //FROM CELSIUS
                    delay(5),gotoxy(14,6),printf("Celsius");
                    delay(5),gotoxy(28,6),printf("Fahrenheit");
                    delay(5),gotoxy(45,6),printf("F =  [C*1.8] + 32");
                    delay(5),gotoxy(28,7),printf("Kelvin");
                    delay(5),gotoxy(45,7),printf("K = C  + 273.15");
                    delay(5),gotoxy(28,8),printf("Rankine");
                    delay(5),gotoxy(45,8),printf("Ra =  [C*1.8]+ 32 + 459.67");
                    delay(5),gotoxy(28,9),printf("Reaumur");
                    delay(5),gotoxy(45,9),printf("Re =  C * 0.8");

                            //FROM FAHRENHEIT
                            delay(5),gotoxy(13,11),printf("Fahrenheit");
                            delay(5),gotoxy(28,11),printf("Celsius");
                            delay(5),gotoxy(45,11),printf("C = [F-32] / 1.8");
                            delay(5),gotoxy(28,12),printf("Kelvin");
                            delay(5),gotoxy(45,12),printf("K = [F+459.67] / 1.8");
                            delay(5),gotoxy(28,13),printf("Rankine");
                            delay(5),gotoxy(45,13),printf("Ra =  F + 459.67");
                            delay(5),gotoxy(28,14),printf("Reaumur");
                            delay(5),gotoxy(45,14),printf("Re = [F-32] / 2.25");

                                //FROM KELVIN
                                delay(5),gotoxy(14,16),printf("Kelvin");
                                delay(5),gotoxy(28,16),printf("Celsius");
                                delay(5),gotoxy(45,16),printf("C = K - 273.15");
                                delay(5),gotoxy(28,17),printf("Fahrenheit");
                                delay(5),gotoxy(45,17),printf("F = [K*1.8] - 459.67");
                                delay(5),gotoxy(28,18),printf("Rankine");
                                delay(5),gotoxy(45,18),printf("Ra = K * 1.8");
                                delay(5),gotoxy(28,19),printf("Reaumur");
                                delay(5),gotoxy(45,19),printf("Re = [K-273.15] * 0.8");

                                    //FROM RANKINE
```

```
                                    delay(5),gotoxy(14,21),printf("Rankine");
                                    delay(5),gotoxy(28,21),printf("Celsius");
                                    delay(5),gotoxy(45,21),printf("C = [Ra-32-459.67] / 1.8");
                                    delay(5),gotoxy(28,22),printf("Fahrenheit");
                                    delay(5),gotoxy(45,22),printf("F =  Ra - 459.67");
                                    delay(5),gotoxy(28,23),printf("Kelvin");
                                    delay(5),gotoxy(45,23),printf("K =  Ra / 1.8");
                                    delay(5),gotoxy(28,24),printf("Reaumur");
                                    delay(5),gotoxy(45,24),printf("Re = [Ra-32-459.67] / 2.25");

                                        //FROM REAUMUR
                                        delay(5),gotoxy(14,26),printf("Reaumur");
                                        delay(5),gotoxy(28,26),printf("Celsius");
                                        delay(5),gotoxy(45,26),printf("C =  Re * 1.25");
                                        delay(5),gotoxy(28,27),printf("Fahrenheit");
                                        delay(5),gotoxy(45,27),printf("F =  [Re*2.25] + 32");
                                        delay(5),gotoxy(28,28),printf("Kelvin");
                                        delay(5),gotoxy(45,28),printf("K =  [Re*1.25]+ 273.15");
                                        delay(5),gotoxy(28,29),printf("Rankine");
                                        delay(5),gotoxy(45,29),printf("Ra =  [Re*2.25]+ 32 + 459.67");

                                        //FORMULA FACTORS
                                        delay(5),gotoxy(32,31),printf("TEMPERATURE CONVERTER");
                                        delay(5),gotoxy(25,32),printf("9/5 = 1.8    9/4 = 2.25    10/8 = 1.25");

                                            delay(5),gotoxy(30,35),printf("PRESS ANY KEY TO CONTINUE...");

                                            getch();
                                            delay(500),system("cls");
                                            process();

        }
        /*=============================================================================================================================================
        ============================================================*/
        //process method
        int process(){

            delay(300);
            ////////////////////////////////////////////VERTICALS
                for(r=1;r<=18;r++){
                    gotoxy(10,r),printf("*");
                    gotoxy(75,r),printf("*");
                }

                for(r=1;r<=7;r++){
                    gotoxy(3,r+18),printf("*");
                    gotoxy(82,r+18),printf("*");
                }
```

```
192.
193.          ////////////////////////////////////////////////HORIZONTALS
194.              for(r=1;r<=65;r++){
195.              gotoxy(10+r,1),printf("*"); //1st
196.              gotoxy(10+r,9),printf("*"); //2nd
197.              gotoxy(10+r,11),printf("*"); //3rd
198.              gotoxy(10+r,17),printf("*"); //4th
199.          }
200.
201.              for(r=1;r<=80;r++){
202.                  gotoxy(r+2,19),printf("*"); //5th
203.                  gotoxy(r+2,26),printf("*"); //6th
204.              }
205.
206.
207.              //CONVERSION STATEMENTS
208.              CONVERSION:
209.                  gotoxy(12,2),printf("Choose the digit below of the unit you want to convert:\n");
210.                  gotoxy(12,3),printf("\t[1] Celsius\n");
211.                  gotoxy(12,4),printf("\t[2] Fahrenheit\n");
212.                  gotoxy(12,5),printf("\t[3] Kelvin\n");
213.                  gotoxy(12,6),printf("\t[4] Rankine\n");
214.                  gotoxy(12,7),printf("\t[5] Reaumur\n");
215.                  gotoxy(12,8),printf("\t[6] Exit");
216.                  gotoxy(68,2),scanf("%d", &from);
217.
218.                  if(from==1){
219.                   //CELSIUS
220.                      gotoxy(12,10),printf("Enter the amount of Celsius: "), scanf("%f", &C);
221.                      gotoxy(12,13),printf("\t[1] Fahrenheit\n");
222.                      gotoxy(12,14),printf("\t[2] Kelvin\n");
223.                      gotoxy(12,15),printf("\t[3] Rankine\n");
224.                      gotoxy(12,16),printf("\t[4] Reaumur\n");
225.                      gotoxy(12,12),printf("Select the digit below of the unit of conversion: "); scanf("%d", &to);
226.                          if(to==1){ //C-F
227.                              F=(C*1.8)+32;
228.                              gotoxy(12,18),printf("%.2f C is equal to %.2f F", C,F);
229.                              goto Celsius_Trivia;
230.                          }
231.                              else if(to==2){ //C-K
232.                                  K= C + 273.15;
233.                                  gotoxy(12,18),printf("%.2f C is equal to %.2f K", C,K);
234.                                  goto Celsius_Trivia;
235.                              }
236.                                  else if(to==3){ //C-Ra
237.                                      Ra= (C*1.8)+ 32 + 459.67;
238.                                      gotoxy(12,18),printf("%.2f C is equal to %.2f Ra", C,Ra);
239.                                      goto Celsius_Trivia;
```

```
                                    }
                                        else if(to==4){ //C-Re
                                            Re=C*0.8;
                                            gotoxy(12,18),printf("%.2f C is equal to %.2f Re", C,Re);
                                            goto Celsius_Trivia;
                                        }

                                        else{
                                            gotoxy(12,18),printf("Your choice is not in the ranged of 1-4 ");
                                            delay(20),gotoxy(30,28),printf("PRESS ANY KEY TO CONTINUE...");
                                            getch();
                                            system("cls");
                                            process();
                                        }

                                //CELSIUS TRIVIA
                                Celsius_Trivia:
                                gotoxy(5,20),printf("DID YOU KNOW? CELSIUS...");
                                gotoxy(5,21),printf("\tHaving a scale for measuring temperature on which the boiling point of \n");
                                gotoxy(5,22),printf("water is at 100 degrees and the freezing point of water is at 0 degrees.\n");
                                delay(20),gotoxy(30,28),printf("PRESS ANY KEY TO CONTINUE...");
                                getch();
                                system("cls");
                                process();
                            }
        /*=============================================================*/
                        //FAHRENHEIT
                        else if (from==2){
                            gotoxy(12,10),printf("Enter the amount of Fahrenheit: "), scanf("%f", &F);
                            gotoxy(12,13),printf("\t[1] Celsius\n");
                            gotoxy(12,14),printf("\t[2] Kelvin\n");
                            gotoxy(12,15),printf("\t[3] Rankine\n");
                            gotoxy(12,16),printf("\t[4] Reaumur\n");
                            gotoxy(12,12),printf("Select the digit below of the unit of conversion: "); scanf("%d", &to);
                                if(to==1){ //F-C
                                    C = (F- 32) / 1.8;
                                    gotoxy(12,18),printf("%.2f F is equal to %.2f C", F,C);
                                    goto Farenheit_Trivia;
                                }
                                    else if(to==2){ //F-K
                                        K = (F+459.67) /1.8;
                                        gotoxy(12,18),printf("%.2f F is equal to %.2f K", F,K);
                                        goto Farenheit_Trivia;
                                    }
                                        else if(to==3){ //F-Ra
                                            Ra = F + 459.67;
                                            gotoxy(12,18),printf("%.2f F is equal to %.2f Ra", F,Ra);
                                            goto Farenheit_Trivia;
```

```
                                    }
                                        else if(to==4){ //F-Re
                                            Re = (F-32) / 2.25;
                                            gotoxy(12,18),printf("%.2f F is equal to %.2f Re", F,Re);
                                            goto Farenheit_Trivia;
                                        }
                                            else{
                                                gotoxy(12,18),printf("Your choice is not in the ranged of 1-4 ");
                                                delay(20),gotoxy(30,28),printf("PRESS ANY KEY TO CONTINUE...");
                                                getch();
                                                system("cls");
                                                process();
                                            }
                                //FAREHNHEIT TRIVIA
                                Farenheit_Trivia:
                                        gotoxy(5,20),printf("DID YOU KNOW? FAHRENHEIT...");
                                        gotoxy(5,21),printf("\tHaving a scale for measuring temperature on which the boiling point of \n");
                                        gotoxy(5,22),printf("water is at 212 degrees above zero and the freezing point is at 32 degrees \n");
                                        gotoxy(5,23),printf("above zero.\n");
                                        delay(20),gotoxy(30,28),printf("PRESS ANY KEY TO CONTINUE...");
                                        getch();
                                        system("cls");
                                        process();
                        }
        /*=============================================================*/
                        //KELVIN
                        else if(from==3){
                           gotoxy(12,10),printf("Enter the amount of Kelvin: "), scanf("%f", &K);
                           gotoxy(12,13),printf("\t[1] Celsius\n");
                           gotoxy(12,14),printf("\t[2] Fahrenheit\n");
                           gotoxy(12,15),printf("\t[3] Rankine\n");
                           gotoxy(12,16),printf("\t[4] Reaumur\n");
                           gotoxy(12,12),printf("Select the digit below of the unit of conversion: "); scanf("%d", &to);
                               if(to==1){ //K-C
                                   C = K-273.15;
                                   gotoxy(12,18),printf("%.2f K is equal to %.2f C", K,C);
                                   goto Kelvin_Trivia;

                               }
                                   else if(to==2){ //K-F
                                       F = (K*1.8) - 459.67;
                                       gotoxy(12,18),printf("%.2f K is equal to %.2f F", K,F);
                                       goto Kelvin_Trivia;
                                   }
                                       else if(to==3){ //K-Ra
                                           Ra = K*1.8;
                                           gotoxy(12,18),printf("%.2f K is equal to %.2f Ra", K,Ra);
                                           goto Kelvin_Trivia;
```

```
                                    }
                                        else if(to==4){ //K-Re
                                            Re = (K-273.15) * 0.8;
                                            gotoxy(12,18), printf("%.2f K is equal to %.2f Re", K,Re);
                                            goto Kelvin_Trivia;
                                        }
                                            else{
                                                gotoxy(12,18),printf("Your choice is not in the ranged of 1-4 ");
                                                delay(20),gotoxy(30,28),printf("PRESS ANY KEY TO CONTINUE...");
                                                getch();
                                                system("cls");
                                                process();
                                            }
                                //KELVIN TRIVIA
                                Kelvin_Trivia:
                                        gotoxy(5,20),printf("DID YOU KNOW? KELVIN...");
                                        gotoxy(5,21),printf("\tThe base unit of temperature in the International System of Units that is\n");
                                        gotoxy(5,22),printf("equal to 1/273.16 of the Kelvin scale temperature of the triple point of \n");
                                        gotoxy(5,23),printf("water.\n");
                                        delay(20),gotoxy(30,28),printf("PRESS ANY KEY TO CONTINUE...");
                                        getch();
                                        system("cls");
                                        process();
                        }
        /*=============================================================*/
                //RANKINE
                else if (from==4){
                        gotoxy(12,10),printf("Enter the amount of Rankine: "), scanf("%f", &Ra);
                        gotoxy(12,13),printf("\t[1] Celsius\n");
                        gotoxy(12,14),printf("\t[2] Fahrenheit\n");
                        gotoxy(12,15),printf("\t[3] Kelvin\n");
                        gotoxy(12,16),printf("\t[4] Reaumur\n");
                        gotoxy(12,12),printf("Select the digit below of the unit of conversion: "); scanf("%d", &to);
                            if(to==1){ //Ra-C
                                C = (Ra-32-459.67) / 1.8;
                                gotoxy(12,18),printf("%.2f Ra is equal to %.2f C", Ra,C);
                                goto Rankine_Trivia;
                            }
                                else if(to==2){ //Ra-F
                                    F = Ra-459.67;
                                    gotoxy(12,18),printf("%.2f Ra is equal to %.2f F", Ra,F);
                                    goto Rankine_Trivia;
                                }
                                    else if(to==3){ //Ra-K
                                        K= Ra/1.8;
                                        gotoxy(12,18),printf("%.2f Ra is equal to %.2f K", Ra,K);
                                        goto Rankine_Trivia;
                                    }
```

```
                                    else if(to==4){ //Ra-Re
                                        Re = (Ra-32-459.67)/2.25;
                                        gotoxy(12,18), printf("%.2f Ra is equal to %.2f Re", Ra,Re);
                                        goto Rankine_Trivia;
                                    }
                                        else{
                                            gotoxy(12,18),printf("Your choice is not in the ranged of 1-4 ");
                                            delay(20),gotoxy(30,28),printf("PRESS ANY KEY TO CONTINUE...");
                                            getch();
                                            system("cls");
                                            process();
                                        }
                                //RANKINE TRIVIA
                                Rankine_Trivia:
                                        gotoxy(5,20),printf("DID YOU KNOW? RANKINE...");
                                        gotoxy(5,21),printf("\tRelating to an absolute-temperature scale on which the unit of \n");
                                        gotoxy(5,22),printf("measurement equals a Fahrenheit degree and on which the freezing point of \n");
                                        gotoxy(5,23),printf("water is 491.67 degrees and the boiling point 671.67 degrees. \n");
                                        delay(20),gotoxy(30,28),printf("PRESS ANY KEY TO CONTINUE...");
                                        getch();
                                        system("cls");
                                        process();

                }
        /*================================================================*/
                //REAUMUR
                else if(from==5){

                        gotoxy(12,10),printf("Enter the amount of Reaumur: "), scanf("%f", &Re);
                        gotoxy(12,13),printf("\t[1] Celsius\n");
                        gotoxy(12,14),printf("\t[2] Fahrenheit\n");
                        gotoxy(12,15),printf("\t[3] Kelvin\n");
                        gotoxy(12,16),printf("\t[4] Rankine\n");
                        gotoxy(12,12),printf("Select the digit below of the unit of conversion: "); scanf("%d", &to);
                            if(to==1){ //Re-C
                                C = Re*1.25;
                                gotoxy(12,18),printf("%.2f Re = %.2f C", Re,C);
                                goto Reaumur_Trivia;
                            }
                                else if(to==2){ //Re-F
                                    F = (Re*2.25) + 32;
                                    gotoxy(12,18),printf("%.2f Re = %.2f F", Re,F);
                                    goto Reaumur_Trivia;
                                }
                                    else if(to==3){ //Re-K
                                        K =  (Re*1.25) + 273.15;
                                        gotoxy(12,18),printf("%.2f Re = %.2f K", Re,K);
                                        goto Reaumur_Trivia;
```

```
                                    }
                                        else if(to==4){ //Re-K
                                            Ra =  (Re*2.25)+ 32+ 459.67;
                                            gotoxy(12,18),printf("%.2f Re = %.2f Ra", Re,Ra);
                                            goto Reaumur_Trivia;
                                        }
                                            else{
                                                gotoxy(12,18),printf("Your choice is not in the ranged of 1-4 ");
                                                delay(20),gotoxy(30,28),printf("PRESS ANY KEY TO CONTINUE...");
                                                getch();
                                                system("cls");
                                                process();
                                            }
                                //REAUMUR TRIVIA
                                Reaumur_Trivia:
                                    gotoxy(5,20),printf("DID YOU KNOW? REAUMUR...");
                                    gotoxy(5,21),printf("\tRelating to a thermometric scale on which the boiling point of water is at\n");
                                    gotoxy(5,22),printf("80 degrees above the zero of the scale and the freezing point is at zero.\n");
                                    delay(20),gotoxy(30,28),printf("PRESS ANY KEY TO CONTINUE...");
                                    getch();
                                    system("cls");
                                    process();
                        }

                        else if(from==6){
                            system("cls");
                            thanks();
                        }


                        else{
                            gotoxy(12,10),printf("Invalid unit. Input must be ranged from 1-6");
                            delay(20),gotoxy(30,28),printf("PRESS ANY KEY TO CONTINUE...");
                            getch();
                            system("cls");
                            process();
                        }

        }
        /*=============================================================================================================================================
    ============================================================*/
        //thanks method
        int thanks(){

            /*increment by 5*/
                for(r=1;r<=5;r++){

                    delay(50);
```

```
479.                    //T1
480.                    gotoxy(r+10,1),printf("*");
481.                    gotoxy(13,r),printf("*");
482.                    //H1
483.                    gotoxy(17,r),printf("*");
484.                    gotoxy(16+r,3),printf("*");
485.                    gotoxy(21,r),printf("*");
486.                    //A1
487.                    gotoxy(23,r),printf("*");
488.                    gotoxy(22+r,1),printf("*");
489.                    gotoxy(22+r,3),printf("*");
490.                    gotoxy(27,r),printf("*");
491.                    //N1
492.                    gotoxy(29,r),printf("*");
493.                    gotoxy(28+r,r),printf("*");
494.                    gotoxy(33,r),printf("*");
495.                    //K1
496.                    gotoxy(35,r),printf("*");
497.                    //S1
498.                    gotoxy(39+r,1),printf("*");
499.                    gotoxy(39+r,3),printf("*");
500.                    gotoxy(39+r,5),printf("*");
501.
502.                    //A2
503.                    gotoxy(48,r),printf("*");
504.                    gotoxy(47+r,1),printf("*");
505.                    gotoxy(47+r,3),printf("*");
506.                    gotoxy(52,r),printf("*");
507.                    //N2
508.                    gotoxy(54,r),printf("*");
509.                    gotoxy(53+r,r),printf("*");
510.                    gotoxy(58,r),printf("*");
511.                    //D2
512.                    gotoxy(60,r),printf("*");
513.
514.                    //H3
515.                    gotoxy(2,6+r),printf("*");
516.                    gotoxy(r+1,9),printf("*");
517.                    gotoxy(6,6+r),printf("*");
518.                    //A3
519.                    gotoxy(8,6+r),printf("*");
520.                    gotoxy(r+7,7),printf("*");
521.                    gotoxy(r+7,9),printf("*");
522.                    gotoxy(12,6+r),printf("*");
523.
524.                    //E3
525.                    gotoxy(20,6+r),printf("*");
526.                    gotoxy(r+19,7),printf("*");
```

```
527.                    gotoxy(r+19,9),printf("*");
528.                    gotoxy(r+19,11),printf("*");
529.
530.                    //A4
531.                    gotoxy(28,6+r),printf("*");
532.                    gotoxy(r+27,7),printf("*");
533.                    gotoxy(r+27,9),printf("*");
534.                    gotoxy(32,6+r),printf("*");
535.
536.                    //N5
537.                    gotoxy(36,6+r),printf("*");
538.                    gotoxy(35+r,6+r),printf("*");
539.                    gotoxy(40,6+r),printf("*");
540.                    //I5
541.                    gotoxy(42,6+r),printf("*");
542.                    //C5
543.                    gotoxy(44,6+r),printf("*");
544.                    gotoxy(r+43,7),printf("*");
545.                    gotoxy(r+43,11),printf("*");
546.                    //E5
547.                    gotoxy(50,6+r),printf("*");
548.                    gotoxy(r+49,7),printf("*");
549.                    gotoxy(r+49,9),printf("*");
550.                    gotoxy(r+49,11),printf("*");
551.
552.                    //D6
553.                    gotoxy(58,r+6),printf("*");
554.                    //A6
555.                    gotoxy(64,6+r),printf("*");
556.                    gotoxy(r+63,7),printf("*");
557.                    gotoxy(r+63,9),printf("*");
558.                    gotoxy(68,6+r),printf("*");
559.                }
560.
561.                /*increment by 3x*/
562.                for(r=1;r<=3;r++){
563.                    //K1
564.                    gotoxy(35+r,4-r),printf("*");
565.                    gotoxy(35+r,r+2),printf("*");
566.                    //S1
567.                    gotoxy(40,r),printf("*");
568.                    gotoxy(44,r+2),printf("*");
569.                    //D2
570.                    gotoxy(59+r,1),printf("*");
571.                    gotoxy(61+r,r),printf("*");
572.                    gotoxy(61+r,6-r),printf("*");
573.                    gotoxy(59+r,5),printf("*");
574.
```

```
575.                    //V3
576.                    gotoxy(14,6+r),printf("*");
577.                    gotoxy(13+r,8+r),printf("*");
578.                    gotoxy(19-r,8+r),printf("*");
579.                    gotoxy(18,6+r),printf("*");
580.
581.                    //D6
582.                    gotoxy(57+r,7),printf("*");
583.                    gotoxy(59+r,6+r),printf("*");
584.                    gotoxy(59+r,12-r),printf("*");
585.                    gotoxy(57+r,11),printf("*");
586.                    //Y6
587.                    gotoxy(69+r,6+r),printf("*");
588.                    gotoxy(71+r,10-r),printf("*");
589.                    gotoxy(72,8+r),printf("*");
590.                    }
591.
592.                    exit(EXIT_SUCCESS); //this is an exit function, it terminates the whole program.
593.
594.        }
595.
```