SUNIL MEENA (IOT620)

PROJECT 35@IOT

TASK ID = 150

C Program for convert Temperature Celsius to Fahrenheit →

```
#include <stdio.h>
float convertCtoF(float c)
{
   return ((c * 9.0 / 5.0) + 32.0);
}
int main()
{
   float c, f;
   printf("Enter temperature in Celsius: ");
   scanf("%f", &c);

   f = convertCtoF(c);
   printf("%.2f Celsius = %.2f Fahrenheit", c, f);
   return 0;
}
```

C Program for convert Temperature Fahrenheit to Celsius →

```
#include <stdio.h>
float convertFtoC(float f)
{
   return ((f - 32) / 1.8);
}
```

```
int main ()
{
   float c, f;
   printf ("\n\nEnter temperature in Fahrenheit: ");
   scanf ("%f”, &f);
   c = convertFtoC(f);
   printf ("%.2f Fahrenheit = %.2f Celsius", f, c);
   return 0;
}
```

Currency Conversion →

```
#include <stdio.h>
int main()
{
  float amount;
  float INR, USD, AED;
  int choice;

  printf ("Following are the Choices:");
  printf ("\nEnter 1 to convert INR to USD and AED: INR");
  printf ("\nEnter 2 to convert USD to INR and AED: USD");
  printf ("\nEnter 3 to convert AED to INR and USD: AED");

  printf ("\nEnter your choice: ");
  scanf ("%d", &choice);

  printf ("Enter the amount you want to convert?\n");
  scanf("%f", &amount);

  switch (choice)
  {
```

```
    case 1:
        printf("%.2f INR =  %.2f USD", amount, amount*0.013);
        printf("\n%.2f INR =  %.2f AED", amount, amount*0.047);
        break;

    case 2:
        printf("\n%.2f USD =  %.2f INR", amount, amount*77.69);
        printf("\n%.2f USD =  %.2f AED", amount, amount*3.67);

        break;

    case 3:

        printf ("\n%.2f AED = %.2f INR", amount, amount*21.15);
        printf ("\n%.2f AED = %.2f USD", amount, amount*0.27);

        break;

    default:
        printf("\nInvalid Input");
  }
  return 0;
}
```

Number conversion

Binary to Hexadecimal →

```
#include <stdio.h>
int main ()
{
   long int bi, hex = 0, i = 1, m;

   printf ("Enter the binary number: ");
   scanf ("%ld", &bi);
   while (bi != 0)
   {
      m = bi % 10;
      hex = hex + m * i;
      i = i * 2;
      bi = bi / 10;
   }
   printf ("Equivalent hexadecimal value: %lX", hex);
   return 0;
}
```

Binary to Decimal →

```
#include <stdio.h>
#include <math.h>

int main () {
  long long n;
  printf ("Enter a binary number: ");
  scanf ("%lld", &n);
  printf ("%lld in binary = %d in decimal", n, convert(n));
  return 0;
}
int convert(long long n) {
```

```
 int dec = 0, i = 0, m;

 while (n!=0) {
  m = n % 10;
  n /= 10;
  dec += m * pow (2, i);
  ++i;
 }

 return dec;
}
```

Hexadecimal to Binary →

```
#include<stdio.h>
int main ()
{
        char hexNum[100];
        long int count=0;
        printf ("Enter a hexadecimal number To Convert it into Binary: ");
        scanf ("%s", hexNum);
        print f("\n Binary Number is : ");
        while(hexNum[count])
        {
                switch(hexNum[count])
                {
                        case '0' : printf ("0000");
                                break;
                        case '1' : printf("0001");
                                break;
                        case '2' : printf("0010");
                                break;
```

```
case '3' : printf("0011");
           break;
case '4' : printf("0100");
           break;
case '5' : printf("0101");
           break;
case '6' : printf("0110");
           break;
case '7' : printf("0111");
           break;
case '8' : printf("1000");
           break;
case '9' : printf("1001");
           break;
case 'A' : printf("1010");
           break;
case 'B' : printf("1011");
           break;
case 'C' : printf("1100");
           break;
case 'D' : printf("1101");
           break;
case 'E' : printf("1110");
           break;
case 'F' : printf("1111");
           break;
case 'a' : printf("1010");
           break;
case 'b' : printf("1011");
           break;
case 'c' : printf("1100");
```

```
                    break;
                case 'd' : printf("1101");
                    break;
                case 'e' : printf("1110");
                    break;
                case 'f' : printf("1111");
                    break;
                default : printf("\nInvalid Entry, Please Try Again  %c",hexNum[count]);
            }
            count++;
        }
        return 0;
}
```

Decimal to Binary →

```
#include <stdio.h>

int main ()

{

   int a[10], number, i, j;

   printf("\n Please Enter the Number You want to Convert  :  ");

   scanf("%d", &number);



   for(i = 0; number > 0; i++)

   {

      a[i] = number % 2;

      number = number / 2;
```

```
    }


    printf ("\n Binary Number of a Given Number =  ");
    for(j = i - 1; j >= 0; j--)  {
        printf(" %d ", a[j]);
    }
    printf("\n");
    return 0;
}
```