Task # 01

```cpp
#include <iostream>

int main()
{
    int num_1 = 1990;
    int num_2;
    for (int i=0; i<=3; i++) {
        if(i==0) {
            num_2 = 135;
        } else if(i==1) {
            num_2 = 7290;
        } else if(i==2) {
            num_2 = 11300;
        } else if(i==3) {
            num_2 = 16200;
        }

        std::cout << num_1 + i << " " << num_2 << "\n";
    }
    return 0;
}
```

Task # 02

```cpp
#include <iostream>

int main()
{
    std::cout << "Select Conversion:\n1.) Celsius to Fahrenheit??\n2.)
Fahrenheit to Celsius??\n";
    int choice;
    std::cin >> choice;
    int temperature;

    switch (choice)
    {
    case 1:
        std::cout << "Enter temperature: ";
        std::cin >> temperature;
        std::cout << "Temperature in Fahrenheit: " << (temperature * 9 / 5) +
32;
        break;
    case 2:
        std::cout << "Enter temperature: ";
        std::cin >> temperature;
        std::cout << "Temperature in Celsius: " << (temperature - 32) * 5/9;
```

```
        break;
    default:
        break;
    }
    return 0;
}
```

Task # 03

```
#include <iostream>

int main()
{
    std::cout << "Curreny Converter!!\n";
    std::cout << "Enter amount in $: ";

    float usd = 1.487;
    float french = 0.172; // Actual Value is 0.93
    float euro = 0.584; // Actual Value is 0.93
    float yen = 0.00955; // Actual Value is 147.77
    float input;
    std::cin >> input;

    std::cout << "$" << input << " in USD: " << input << "\n$" << input << "
in French: " << input * french << "\n$" << input << " in German Euro: " <<
input * euro << "\n$" << input << " in Yen: " << input*yen;

    return 0;
}
```

Task # 04

```
#include <iostream>

struct fraction
{
    int num;
    int den;
};


int main()
{
   fraction f_frac;
   fraction s_frac;
   char c;
```

```
   std::cout << "Enter first Fraction (x/y): ";
   std::cin >> f_frac.num >> c >> f_frac.den;

   std::cout << "Enter second Fraction (x/y): ";
   std::cin >> s_frac.num >> c >> s_frac.den;

   std::cout << "Output: " << ((f_frac.num*s_frac.den) +
(s_frac.num*f_frac.den)) << "/" << f_frac.den*s_frac.den;
    return 0;
}
```

Task # 05

```
#include <iostream>

int main()
{
    char vowel;
    char *ptr = &vowel;

    std::cout << "Enter a Letter: ";
    std::cin >> vowel;

    if(*ptr == 'a' || 'A') {
        std::cout << "Vowel";
    } else if(*ptr == 'e' || 'E') {
        std::cout << "Vowel";
    } else if(*ptr == 'i' || 'I') {
        std::cout << "Vowel";
    } else if(*ptr == 'o' || 'O') {
        std::cout << "Vowel";
    } else if(*ptr == 'U' || 'u') {
        std::cout << "Vowel";
    } else {
        std::cout << "Not a Vowel";
    }

    return 0;
}
```

Task # 06

```cpp
#include <iostream>

int main()
{
   int a, b, c;

   std::cout << "Enter side a of Triangle: ";
   std::cin >> a;
   std::cout << "Enter side b of Triangle: ";
   std::cin >> b;
   std::cout << "Enter side c of Triangle: ";
   std::cin >> c;

   if((a + b) > c) {
    if((c + b) > a) {
        std::cout << "Two Sides are greater!";
    } else if((a + c) > b) {
        std::cout << "Two Sides are greater!";
    } else {
        std::cout << "Not a triangle inequality theorem!";
    }
} else if((c + b) > a) {
    if((a + b) > c) {
        std::cout << "Two Sides are greater!";
    } else if((a + c) > b) {
        std::cout << "Two Sides are greater!";
    } else {
        std::cout << "Not a triangle inequality theorem!";
    }
} else if((a + c) > b) {
    if((a + b) > c) {
        std::cout << "Two Sides are greater!";
    } else if((c + b) > a) {
        std::cout << "Two Sides are greater!";
    } else {
        std::cout << "Not a triangle inequality theorem!";
    }
} else {
    std::cout << "Not a triangle inequality theorem!";
}
    return 0;
}
```