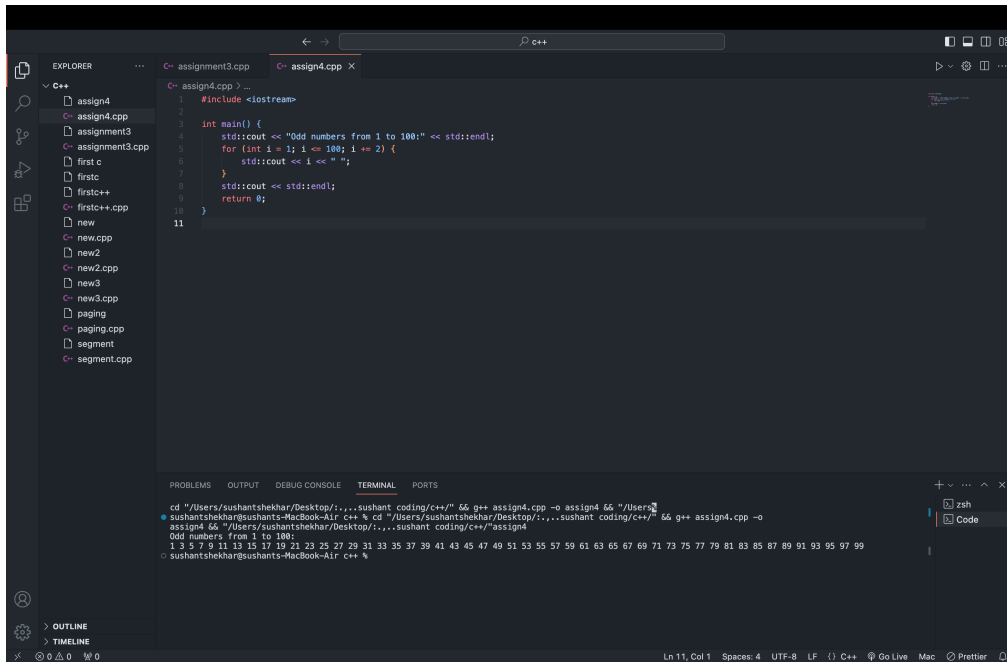


Week-2/assignment-3

1. Print all the odd numbers from 1 to 100.

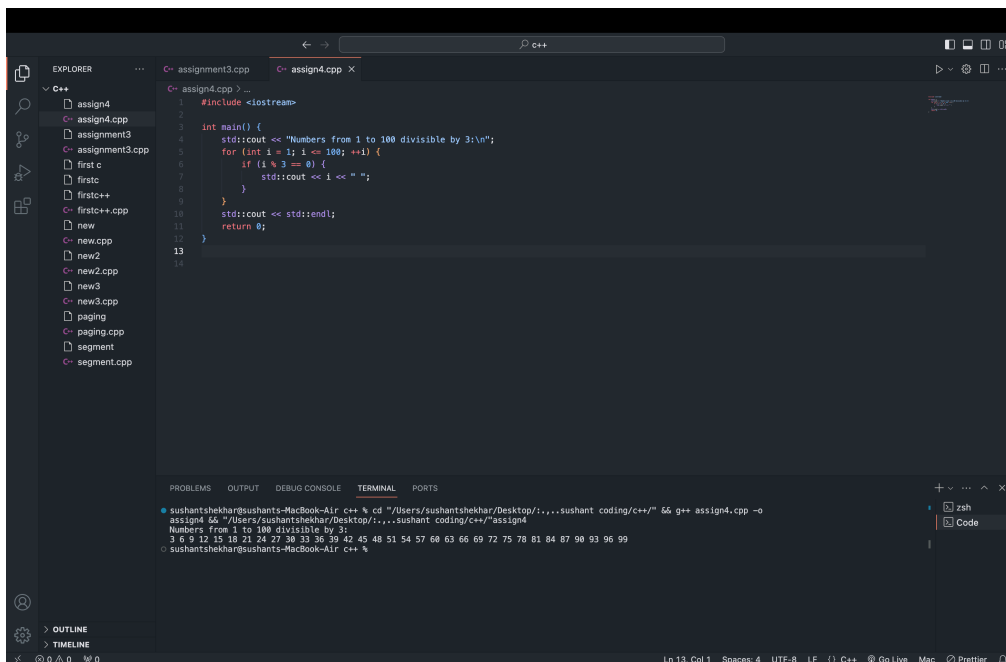


```
1 #include <iostream>
2
3 int main() {
4     std::cout << "Odd numbers from 1 to 100:" << std::endl;
5     for (int i = 1; i <= 100; i += 2) {
6         std::cout << i << " ";
7     }
8     std::cout << std::endl;
9     return 0;
10 }
```

```
cd "/Users/sushantshah/Desktop/...sushant coding/c++/" 66 g++ assign4.cpp -o assign4 66 "/Users/sushantshah/Desktop/...sushant coding/c++/" 66 g++ assign4.cpp -o assign4 66 "/Users/sushantshah/Desktop/...sushant coding/c++/" 66 g++ assign4.cpp -o assign4 66 "/Users/sushantshah/Desktop/...sushant coding/c++/" 66 g++ assign4.cpp -o assign4
Odd numbers from 1 to 100:
1 3 5 7 9 11 13 15 17 19 21 23 25 27 29 31 33 35 37 39 41 43 45 47 49 51 53 55 57 59 61 63 65 67 69 71 73 75 77 79 81 83 85 87 89 91 93 95 97 99
```

2.

Print all numbers from 1 to 100 that are divisible by 3



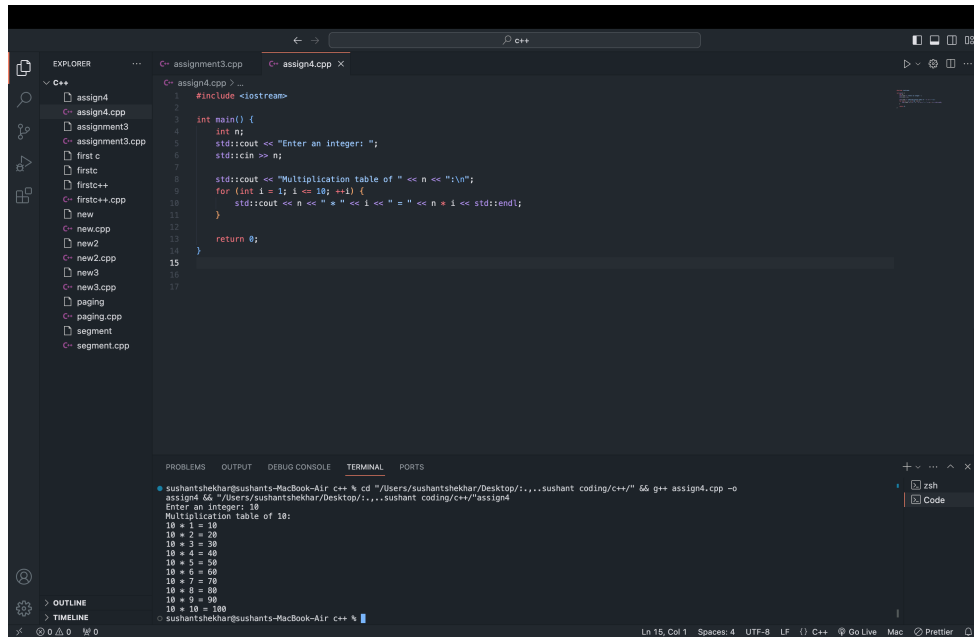
```
1 #include <iostream>
2
3 int main() {
4     std::cout << "Numbers from 1 to 100 divisible by 3:\n";
5     for (int i = 1; i <= 100; ++i) {
6         if (i % 3 == 0) {
7             std::cout << i << " ";
8         }
9     }
10    std::cout << std::endl;
11    return 0;
12 }
```

```
cd "/Users/sushantshah/Desktop/...sushant coding/c++/" 66 g++ assign4.cpp -o assign4 66 "/Users/sushantshah/Desktop/...sushant coding/c++/" 66 g++ assign4.cpp -o assign4 66 "/Users/sushantshah/Desktop/...sushant coding/c++/" 66 g++ assign4.cpp -o assign4 66 "/Users/sushantshah/Desktop/...sushant coding/c++/" 66 g++ assign4.cpp -o assign4
Numbers from 1 to 100 divisible by 3:
3 6 9 12 15 18 21 24 27 30 33 36 39 42 45 48 51 54 57 60 63 66 69 72 75 78 81 84 87 90 93 96 99
```

3.

Print the table of 'n'. Here 'n' is an integer which the user will input.

Week-2/assignment-3



The screenshot shows a Visual Studio Code editor with a C++ file named `assign4.cpp`. The code is as follows:

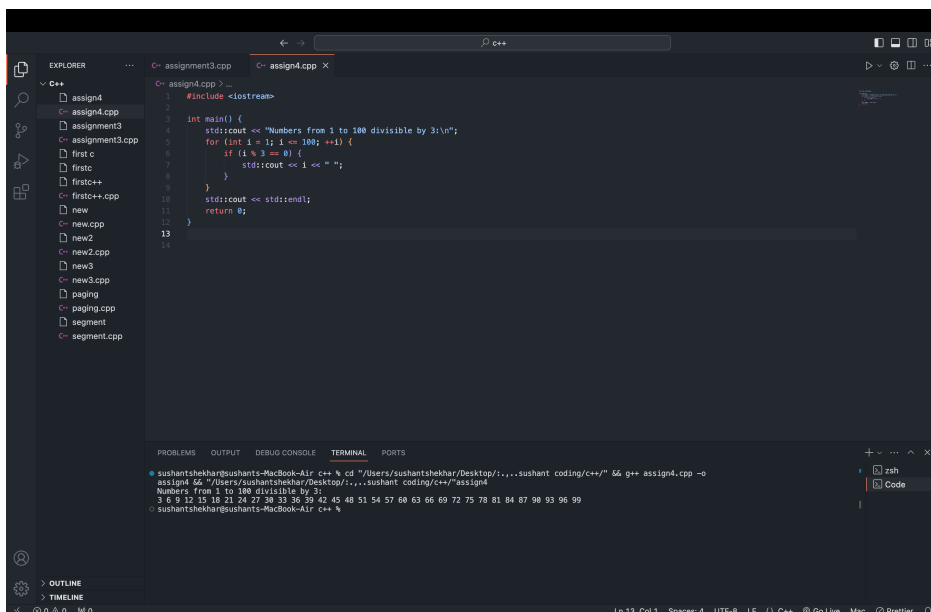
```
1 #include <iostream>
2
3 int main() {
4     int n;
5     std::cout << "Enter an integer: ";
6     std::cin >> n;
7
8     std::cout << "Multiplication table of " << n << ":\n";
9     for (int i = 1; i <= 10; ++i) {
10        std::cout << n << " * " << i << " = " << n * i << " ";
11    }
12    std::cout << "\n";
13    return 0;
14 }
```

The terminal output shows the program running and displaying the multiplication table for the input integer 10:

```
sushantshekharsushants-MacBook-Air ~ % cd "/Users/sushantshekharsushants/Desktop/..." && g++ assign4.cpp -o assign4
sushantshekharsushants-MacBook-Air ~ % ./assign4
Enter an integer: 10
Multiplication table of 10:
10 * 1 = 10
10 * 2 = 20
10 * 3 = 30
10 * 4 = 40
10 * 5 = 50
10 * 6 = 60
10 * 7 = 70
10 * 8 = 80
10 * 9 = 90
10 * 10 = 100
```

4.

Display this AP - 4,7,10,13,16.. upto 'n' terms.



The screenshot shows a Visual Studio Code editor with a C++ file named `assign4.cpp`. The code is as follows:

```
1 #include <iostream>
2
3 int main() {
4     std::cout << "Numbers from 1 to 100 divisible by 3:\n";
5     for (int i = 1; i <= 100; ++i) {
6         if (i % 3 == 0) {
7             std::cout << i << " ";
8         }
9     }
10    std::cout << "\n";
11    return 0;
12 }
```

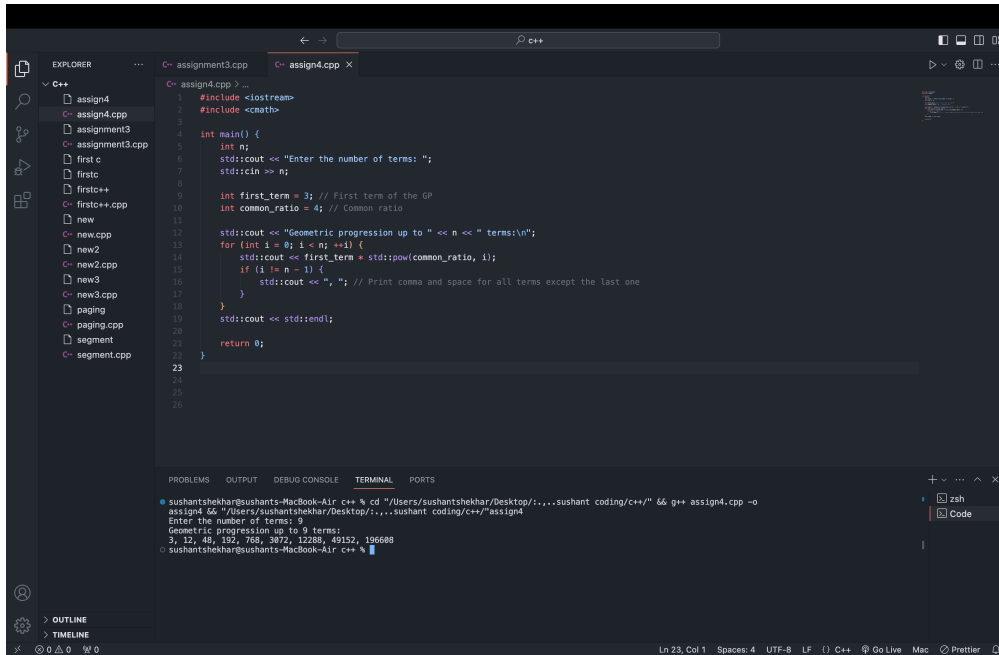
The terminal output shows the program running and displaying the numbers from 1 to 100 divisible by 3:

```
sushantshekharsushants-MacBook-Air ~ % cd "/Users/sushantshekharsushants/Desktop/..." && g++ assign4.cpp -o assign4
sushantshekharsushants-MacBook-Air ~ % ./assign4
Numbers from 1 to 100 divisible by 3:
3 6 9 12 15 18 21 24 27 30 33 36 39 42 45 48 51 54 57 60 63 66 69 72 75 78 81 84 87 90 93 96 99
```

5.

Display this GP - 3,12,48,.. upto 'n' terms.

Week-2/assignment-3

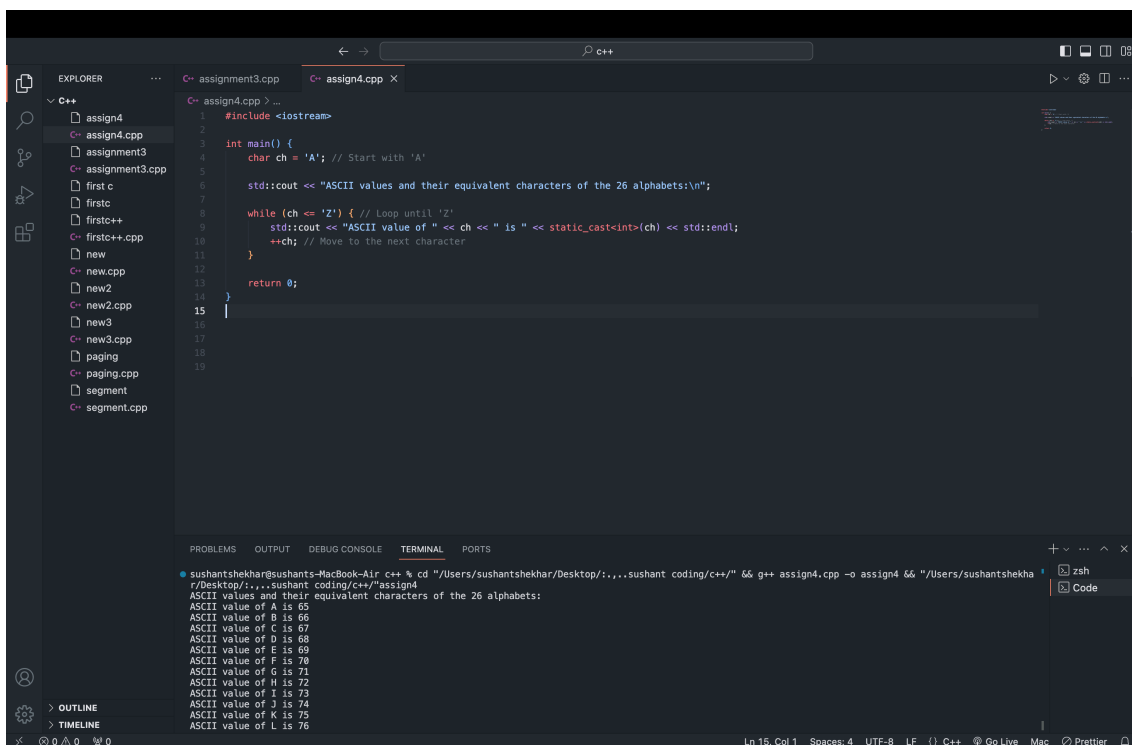


```
1 #include <iostream>
2 #include <cmath>
3
4 int main() {
5     int n;
6     std::cout << "Enter the number of terms: ";
7     std::cin >> n;
8
9     int first_term = 3; // First term of the GP
10    int common_ratio = 4; // Common ratio
11
12    std::cout << "Geometric progression up to " << n << " terms:\n";
13    for (int i = 0; i < n; ++i) {
14        std::cout << first_term * std::pow(common_ratio, i);
15        if (i != n - 1) {
16            std::cout << ", "; // Print comma and space for all terms except the last one
17        }
18        std::cout << std::endl;
19    }
20    return 0;
21 }
```

Terminal Output:

```
sushantshekh@Sushants-MacBook-Air c++ % cd "/Users/sushantshekh/Desktop/....sushant coding/c++/" && g++ assign4.cpp -o assign4 && "/Users/sushantshekh/Desktop/....sushant coding/c++/"assign4
Enter the number of terms: 9
Geometric progression up to 9 terms:
3, 12, 48, 192, 768, 3072, 12288, 49152, 196608
```

6. Write a program to print all the ASCII values and their equivalent characters of 26 alphabets using a while loop.



```
1 #include <iostream>
2
3 int main() {
4     char ch = 'A'; // Start with 'A'
5
6     std::cout << "ASCII values and their equivalent characters of the 26 alphabets:\n";
7
8     while (ch <= 'Z') { // Loop until 'Z'
9         std::cout << "ASCII value of " << ch << " is " << static_cast<int>(ch) << std::endl;
10        ++ch; // Move to the next character
11    }
12
13    return 0;
14 }
```

Terminal Output:

```
sushantshekh@Sushants-MacBook-Air c++ % cd "/Users/sushantshekh/Desktop/....sushant coding/c++/" && g++ assign4.cpp -o assign4 && "/Users/sushantshekh/Desktop/....sushant coding/c++/"assign4
ASCII values and their equivalent characters of the 26 alphabets:
ASCII value of A is 65
ASCII value of B is 66
ASCII value of C is 67
ASCII value of D is 68
ASCII value of E is 69
ASCII value of F is 70
ASCII value of G is 71
ASCII value of H is 72
ASCII value of I is 73
ASCII value of J is 74
ASCII value of K is 75
ASCII value of L is 76
```