Patterns
(Assignment Solutions)

Question 1 :

```cpp
//0-1 Triangle Pattern
  bool val = true;
  int n = 5;
  for(int i=0; i<n; i++) {
      for(int j=0; j<=i; j++) {
          cout << val << " ";
          val = !val;
      }
      cout << "\n";
  }
```

Question 2 :

```cpp
//Rhombus Pattern
  int n = 5;
  for(int i=0; i<n; i++) {
      //spaces
      for(int j=0; j<=n-i-1; j++) {
          cout << " ";
      }
      //stars
      for(int j=0; j<n; j++) {
          cout << "*";
      }
      cout << endl;
  }
```

Question 3 :

```cpp
//Palindromic Pattern with Numbers
  int n = 5;
  for(int i=1; i<=n; i++) {
      //spaces
```

```cpp
        for(int j=1; j<=n-i; j++) {
            cout << " ";
        }


        //nums backward
        for(int j=i; j>=1; j--) {
            cout << j;
        }


        //nums forward
        for(int j=2; j<=i; j++) {
            cout << j;
        }
        cout << endl;
    }
```