TASK 01

1.

```
const int i;
```

Error code: C2734

Reason: As i is not an extern(global variable) and it is a constant , that's why it should be initialized.

2. Redefinition

Error code: C2086
Reason: When an identifier is declared or defined more than once, or later declarations differs from the previous one

3.
```
const int i = 90;
i++;
```

Error code: C3892

Reason: As i is declared as a constant, the value of i can not be changed.

4.
```
const int i = 90;
int* p = &i;
```
Error code: C2440

Reason: This happens when a type casting is not possible. As here, there is a type casting from const int* to int*.

5.
```
const int v[] = { 1,2,3 };
v[1]++;
```

This error is same as the no. 3. But this time an array element's value was tried to be changed, but the same error occurs.

6.
```
const int i = 255;
int v[i];
```

Error code: C2131

Reason: This error happens when a constant is not evaluated as a constant while compiling, here i is constant, but in array v it is not an constant.

7.
```
char s[] = "Hello";
const char* pc = s;
pc[0] = 'h';
```

Error: C3892

Reason: Same error as no.3. But this time it is with character array. The value in the first index of character array pc is declared as ‘s’, but later it was tried to change to ‘h’, which is not possible, because that value was declared as a constant.

8.
```
char s[] = "Hello";
char* const cp = s;
cp[0] = 'h';
cp++;
```

Error: C3892

Reason: Same error as no.7. But this time it is possible to change the value inside the index, but it is not possible to do cp++, because this time the address was declared as constant.

9.
```
char s[] = "Hello";
const char* const cpc = s;
cpc[0] = 'h';
cpc++;
```

Error: C3892

Reason: This time it neither possible to change the address value nor the value in the index, because both of them are declared as constant.

10.
```
int j = 0;
int const& i = j;
i = 1;
const int& i = j;
i = 1;
```

Error: C3892

Reason: Here, the value of a constant reference variable was tried to be changed, which is not possible.