C++ Assignments | Time and space complexity analysis - 2 | Week 8

1. Calculate the time complexity for the following code snippet.

```cpp
for(int i = 0; i < n; i++) {
  for(int j = 0; j * j < n; j++) {
    cout << "PhysicsWallah ";
  }
}
```

2. Calculate the time complexity for the following code snippet.

```cpp
int c = 0;
for(int i = 0; i < n; i++) {
  for(int j = 1; j < n; j *= 2) {
    c++;
  }
}
```

3. Calculate the time complexity for the following code snippet.

```cpp
int c = 0;
for(int i = 0; i < n; i++) {
  for(int j = 1; j * j < n; j *= 2) {
    c++;
  }
}
```

4. Calculate the time complexity for the following code snippet.

```cpp
int c = 0;
for(int i = n; i > 0; i /= 2) {
  for(int j = 0; j < i; j ++) {
    c++;
  }
}
```

5. Calculate the time complexity for the following code snippet.

```
int c = 0;
for(int i = 1; i < n; i*=2) {
  for(int j = n; j > i; j--) {
    c++;
  }
}
```

Note:- Please try to invest time doing the assignments which are necessary to build a strong foundation. Do not directly Copy Paste using Google or ChatGPT. Please use your brain😀.