Programming 622 Practical 1

Big O Notation

- Write your answers into to the word document using any word processor application. Save your document as name_icasNo_qualification eg Noble_Nzama_12354_Bsc2ndyear
- convert it to PDF and submit it into this link " https://www.dropbox.com/request/UziZP4CAHhI8a2vnIoMM " before Friday 00:00 (14/08/2020)

1. Indicate whether each of the following statements is *true* or *false*;

    a. $f(n)$ *is* $n0_{(1)}$ means the function $f(n)$ is bounded above by a polynomial function.
    b. f. If *f(n)* is *O(1)*, it means *f (n)* never exceeds the constant, 1.

2. Find the computational complexity of the following code snippets;
    a.

```
int powerA(double x, int n)
{
   if (n == 0)
        return 1;
   if(n == 1)
        return x;
   else
        return x * powerA(x, n - 1);
}
```

    b.

```
count = 0;

for(int i = 1; i <= n; i *= 5 )

    for(int j = 1, j <= i; j + + )

            count + +
```