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Registration no. :: FA22-BSE-037

LAB Mid

Question No.1:-

```
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_____
Desktop              Documents                  Public
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                         |                         |
  ⋮                   Lab_Mid                    Reg_no
                         |
                     Your_name
```
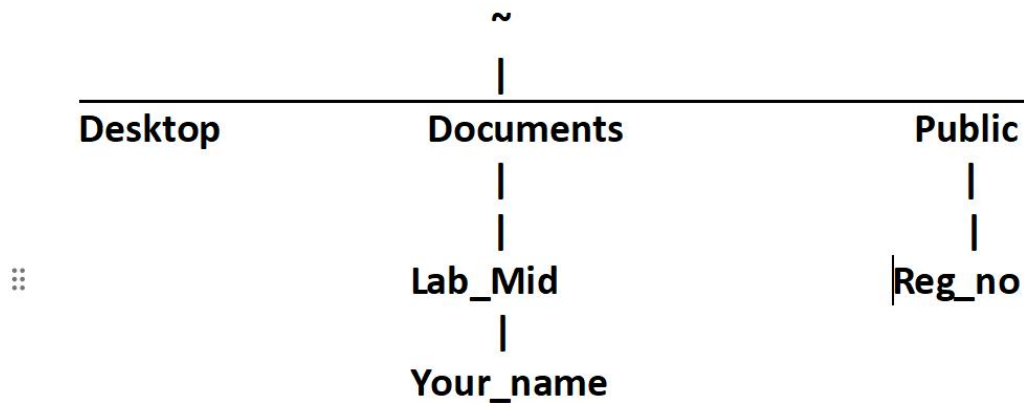
1. **Copy your name directory in Reg_no Directory**
2. **Rename lab_mid to os_lab**
3. **Delete reg_no directory**

Solution::

Question no.2:-

wite a c++ code that takes argumentt as command line argument. the program should find the factorial of a no entered by user as command line argument.

Solution::

```cpp
#include <iostream>
using namespace std;

// Function to calculate factorial
long long factorial(int num) {
    long long fact = 1;
    for (int i = 2; i <= num; i++) {
        fact *= i;
    }
    return fact;
}

int main(int argc, char* argv[]) {
    // Check if command-line argument is provided
    if (argc != 2) {
        cout << "Usage: " << argv[0] << " <number>" << endl;
        return 1;
    }

    // Convert command-line argument to integer
    int num = stoi(argv[1]);

    // Check if input is non-negative
    if (num < 0) {
        cout << "Error: Factorial is not defined for negative numbers." << endl;
        return 1;
    }

    // Calculate and display factorial
    long long fact = factorial(num);
    cout << "Factorial of " << num << " = " << fact << endl;

    return 0;
}
```
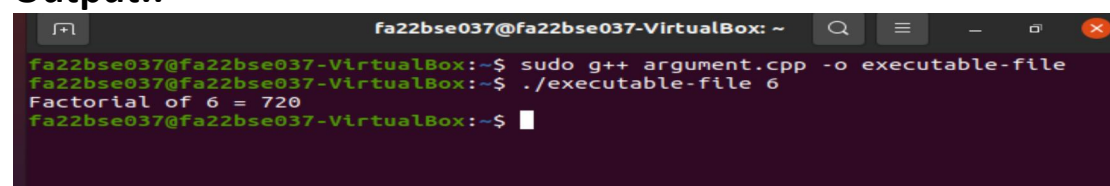
Output::