



كلية تكنولوجيا الصناعة والطاقة

Information Technology
Department
2nd Year



جامعة برج العرب للتكنولوجيا
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Course: Programming Essentials in C++
Semester: 1st term 2025/2026.

Lecturers: Dr. Nehal Elazaly, Dr. Ghada Fathy

Assignment 1: C++ programming

Model Answers
Assignment 1

Question 1

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

int main() {
    string name;
    int age;

    cout << "Enter your name: ";
    cin >> name;
    cout << "Enter your age: ";
    cin >> age;

    cout << "Hello, " << name << "! You are " << age << " years old." << endl;

    return 0;
}
```

Question 2

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

int main() {
    string name = "Mona";
    int age = 20;
    char grade = 'A';

    cout << "Student Name: " << name << endl;
    cout << "Age: " << age << endl;
    cout << "Grade: " << grade << endl;

    return 0;
}
```



Question3

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

int main() {
    int a, b;

    cout << "Enter two numbers: ";
    cin >> a >> b;

    cout << "Sum = " << a + b << endl;
    cout << "Difference = " << a - b << endl;
    cout << "Product = " << a * b << endl;
    cout << "Quotient = " << a / b << endl;
    cout << "Remainder = " << a % b << endl;

    return 0;
}
```

Question4

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

int main() {
    int x = 10;

    x += 5;    // x = 10 + 5
    cout << "After x += 5, x = " << x << endl;

    x -= 3;    // x = 15 - 3
    cout << "After x -= 3, x = " << x << endl;

    x *= 2;    // x = 12 * 2
    cout << "After x *= 2, x = " << x << endl;

    x /= 4;    // x = 24 / 4
    cout << "After x /= 4, x = " << x << endl;

    x %= 3;    // x = 6 % 3
    cout << "After x %= 3, x = " << x << endl;

    return 0;
}
```