SUPRAJA MATHAPATI
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Q1:write a c++ program to print hello world

Source code:

```
#include <iostream>

int main() {
   std::cout << "Welcome" << std::endl;
   return 0;
}
```

Output:

```
PS C:\Users\Hp\Desktop\c++ assig-1> cd "c:\Users\Hp\Desktop\c++ assig-1\" ; if ($?) { g++ first.cpp -o first } ; if ($?) { .\first }
Hello, World!
PS C:\Users\Hp\Desktop\c++ assig-1> cd "c:\Users\Hp\Desktop\c++ assig-1\" ; if ($?) { g++ first.cpp -o first } ; if ($?) { .\first }
Hello, World!
```

Q2:

SOURCE CODE:

```
include <iostream>

int main() {
    // Declare variables to store the numbers
    int num1, num2;

    // Prompt the user to enter the first number
    std::cout << "Enter the first number: ";
    std::cin >> num1;

    // Prompt the user to enter the second number
    std::cout << "Enter the second number: ";
    std::cin >> num2;

    // Calculate the sum
    int sum = num1 + num2;
```

```
    // Display the result
    std::cout << "The sum of " << num1 << " and " << num2 << " is: " << sum <<
std::endl;

    return 0;
}
```

0utput

```
PS C:\Users\Hp\Desktop\c++ assig-1> cd "c:\Users\Hp\Desktop\c++ assig-1\" ; if ($?) { g++
second.cpp -o second } ; if ($?) { .\second }
Enter the first number: 6
Enter the second number: 88
The sum of 6 and 88 is: 94
```

Q3

SOURCE CODE:

```
#include <iostream>

using namespace std;

int main(){
    double length, width;

    cout << "Enter the length of the rectangle:";
    cin >> length;

    cout << "Enter the width of the rectangle:";
    cin >> width;

    double area = length * width;

    double perimeter = 2 * (length + width);

    cout << "Area of the rectangle:" << area << endl;
    cout << "perimeter of the rectangle:" << perimeter << endl;

    return 0;
```

```
}
```

OUTPUT:

```
PS C:\Users\Hp\Desktop\c++ assig-1> cd "c:\Users\Hp\Desktop\c++ assig-1\" ; if ($?) { g++ tempCodeRunnerFile.cpp -o tempCodeRunnerFile } ; if ($?) { .\tempCodeRunnerFile }
Enter the length of the rectangle:88
Enter the width of the rectangle:75
Area of the rectangle:6600
perimeter of the rectangle:326
```

Q4

SOURCE CODE:

```
#include <iostream>

using namespace std;

int main(){
    int number;

    cout <<"enter a number:" ;
    cin >>number;

    number += 40;

    number /= 5;

    number %= 2;

    number *= 10;

    cout << "result:" << number << endl;

    return 0;
}
```

OUTPUT:

```
Enter a number: 50
Result: 0
```

Q5

SOURCE CODE:

```
#include <iostream>
```

```cpp
using namespace std;

int main()
    double celsius, kelvin, fahrenheit;

    // Ask for temperature in Celsius
    cout << "Enter temperature in Celsius: ";
    cin >> celsius;

    // Convert Celsius to Kelvin
    kelvin = celsius + 273.15;

    // Convert Celsius to Fahrenheit
    fahrenheit = (celsius * 9.0 / 5.0) + 32;

    // Display the results
    cout << "Temperature in Celsius: " << celsius << "°C" << endl;
    cout << "Temperature in Kelvin: " << kelvin << "K" << endl;
    cout << "Temperature in Fahrenheit: " << fahrenheit << "°F" << endl;

    return 0;
}
```

OUTPUT:

```
Enter temperature in Celsius: 25
Temperature in Celsius: 25°C
Temperature in Kelvin: 298.15K
Temperature in Fahrenheit: 77°F
```

Q6:

SOURCE CODE:

```cpp
#include <iostream>

int main() {
    double meters;
    const double metersToFeet = 3.28084;
    const double feetToInches = 12.0;
```

```
    std::cout << "Enter length in meters: ";
    std::cin >> meters;



    double feet = meters * metersToFeet;
    int wholeFeet = static_cast<int>(feet);
    double remainingFeet = feet - wholeFeet;
    double inches = remainingFeet * feetToInches;



    std::cout << "Length in feet and inches: " << wholeFeet << " feet " <<
inches << " inches" << std::endl;

    return 0;
}
```

OUTPUT:

```
PS C:\Users\Hp\Desktop\c++ assig-1> cd
"c:\Users\Hp\Desktop\c++ assig-1\" ; if ($?) { g++
tempCodeRunnerFile.cpp -o tempCodeRunnerFile } ; if ($?) {
.\tempCodeRunnerFile }
Enter length in meters: 86
Length in feet and inches: 282 feet 1.82688 inches
```

Q7:

SOURCE CODE

```
#include <iostream>

int main() {
    std::cout << "Welcome" << std::endl;
    return 0;
}
```

Output:

```
PS C:\Users\Hp\Desktop\c++ assig-1\.vscode> cd "c:\Users\Hp\Desktop\c++
assig-1\.vscode\" ; if ($?) { g++ seven.cpp -o seven } ; if ($?) { .\seven }

Welcome
```

```
PS C:\Users\Hp\Desktop\c++ assig-1\.vscode>
```

Q8:
SOURCE CODE:

```
#include <iostream>

int main() {
    // Declare and initialize two numbers
    int a = 5;
    int b = 10;

    // Output the original values
    std::cout << "Before swapping:" << std::endl;
    std::cout << "a = " << a << ", b = " << b << std::endl;

    // Swap the values of a and b
    int temp = a;
    a = b;
    b = temp;

    // Output the swapped values
    std::cout << "After swapping:" << std::endl;
    std::cout << "a = " << a << ", b = " << b << std::endl;

    return 0;
}
```

OUTPUT:

```
PS C:\Users\Hp\Desktop\c++ assig-1\.vscode> cd "c:\Users\Hp\Desktop\c++
assig-1\.vscode\" ; if ($?) { g++ EIGHT.CPP -o EIGHT } ; if ($?) { .\EIGHT }

Before swapping:
a = 5, b = 10
After swapping:
a = 10, b = 5
```