

C++ Programming Lab Manual

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Program 10: Program to Convert Given Number into Octal, Decimal, and Hexadecimal (setbase)

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

int main()
{
    int num;
    cout << "Enter the number\n";
    cin >> setbase(8) >> num;
    cout << "octal value of given number is " << setbase(8) << num << endl;
    cout << "decimal value of given number is " << setbase(10) << num << endl;
    cout << "hexadecimal value of given number is " << setbase(16) << num << endl;
    return 0;
}
```

Program 11: Program to Demonstrate the Use of setw() Manipulator

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

int main()
{
    int age = 18;
    int roll_no = 101;
    cout << setw(13) << "My roll_no is" << setw(5) << roll_no << endl;
    cout << setw(13) << "My age is" << setw(5) << age << endl;
    return 0;
}
```

Program 12: Program to Demonstrate the Use of setfill() Manipulator

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

int main()
{
    int age = 18;
    int roll_no = 101;
    cout << setfill('*');
    cout << setw(13) << "My roll no is" << setw(5) << roll_no << endl;
    cout << setw(13) << "My age is" << setw(5) << age << endl;
}
```

```
    return 0;
}
```

Program 13: Program to Demonstrate the Use of setprecision() Manipulator

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

int main()
{
    float a = 101.2345;
    cout << setprecision(6) << a << endl;
    cout << setprecision(5) << a << endl;
    return 0;
}
```

Program 14: Program to Demonstrate the Use of Implicit Type Conversion

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

int main()
{
    int a = 10;
    float b = 7.5;
    double c;
    c = a + b;
    cout << "c = " << c << endl;
    return 0;
}
```

Program 15: Program to Demonstrate the Use of Explicit Type Conversion

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

int main()
{
    int a = 10;
    int b = 3;
    float c;
    c = (float)a / b;
    cout << "c = " << c << endl;
}
```

```
    return 0;
}
```

Program 16: Program to Convert Temperature Given in Fahrenheit to Celsius

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

int main()
{
    int f = 175;
    float c;
    c = (float)5 / 9 * (f - 32);
    cout << "Temperature in Celsius = " << c << endl;
    return 0;
}
```