Q 6: Write a C++ program to swap two numbers by both call by value and call by reference mechanism, using two functions swap_value() and swap_reference respectively , by getting the choice from the user and executing the user's choice by switch-case.

```cpp
#include <iostream>
using namespace std;
void swap_value(int n1, int n2) {
int temp = n1;
n1 = n2;
n2 = temp;
}
void swap_reference(int &n1, int &n2) {
int temp = n1;
n1 = n2;
n2 = temp;
}
int main () {
int num1, num2;
cout << "Enter the first number : ";
cin >> num1;
cout << "Enter the second number : ";
cin >> num2;
int choice;
cout << "\t1. Swap numbers by using call by value" << endl;
cout << "\t2. Swap numbers by using call by reference" << endl;
cout << "\tEnter your choice : ";
cin >> choice;
switch(choice) {
case 1:
cout << "Before swapping : num1 = " << num1 << " and num2 = " << num2 <<
endl;
swap_value(num1, num2);
cout << "After swapping : num1 = " << num1 << " and num2 = " << num2 <<
endl;
break;
case 2:
cout << "Before swapping : num1 = " << num1 << " and num2 = " << num2 <<
endl;
swap_reference(num1, num2);
cout << "After swapping : num1 = " << num1 << " and num2 = " << num2 <<
endl;
break;
default:
cout << "Invalid Input!" << endl;
```

```
    }
    return 0;
}
```