

```

<html><head></head><body><pre style="word-wrap: break-word; white-space:
pre-wrap;">#include <type_traits>
#include <iostream>

template<typename T>
auto thing(T& t) -> T&
{
    return t;
}

template<typename T>
auto getThing(T& t) -> decltype(auto)
{
    return thing(t);
}

template<typename T>
auto getThingCollapsed(T& t) -> auto
{
    return thing(t);
}

int main()
{
    int x = 5;
    int& starting_thing = x;

    std::cout <<< "Determine if return type is int&" <<<
std::endl;
    std::cout <<< "With decltype(auto): ";
    std::cout <<< std::boolalpha <<<
std::is_same<decltype(getThing(starting_thing)),
int&>::type::value <<< std::endl;

    std::cout <<< "With auto: ";
    std::cout <<< std::boolalpha <<<
std::is_same<decltype(getThingCollapsed(starting_thing)),
int&>::type::value <<< std::endl;

    return 0;
}</pre></body></html>

```