main.cpp

Run

Output

Clear

```cpp
//6.Pointer to an integer

#include <iostream>

int main() {
    int num = 10;
    int *ptr = &num; // Create a pointer to an integer
    std::cout << "Value of num: " << num << std::endl;
    std::cout << "Value pointed by ptr: " << *ptr << std::endl;
    return 0;
}

```

```
/tmp/7mUsOdIw29.o
Value of num: 10
Value pointed by ptr: 10
```

main.cpp

Run

Output

Clear

```cpp
//7.Pointer to a float

#include <iostream>

int main() {
    float num = 10.5;
    float *ptr = &num; // Create a pointer to a float
    std::cout << "Value of num: " << num << std::endl;
    std::cout << "Value pointed by ptr: " << *ptr << std::endl;
    return 0;
}
```

```
/tmp/7mUsOdIw29.o
Value of num: 10.5
Value pointed by ptr: 10.5
```

main.cpp

Run

```cpp
//8.Pointer to a char

#include <iostream>

int main() {
    char ch = 'A';
    char *ptr = &ch; // Create a pointer to a char
    std::cout << "Value of ch: " << ch << std::endl;
    std::cout << "Value pointed by ptr: " << *ptr << std::endl;
    return 0;
}
```

Output

Clear

```
/tmp/7mUsOdIw29.o
Value of ch: A
Value pointed by ptr: A
```

main.cpp

Run

```cpp
//9.Pointer to a double

#include <iostream>

int main() {
    double num = 10.5;
    double *ptr = &num; // Create a pointer to a double
    std::cout << "Value of num: " << num << std::endl;
    std::cout << "Value pointed by ptr: " << *ptr << std::endl;
    return 0;
}
```

Output

Clear

```
/tmp/7mUsOdIw29.o
Value of num: 10.5
Value pointed by ptr: 10.5
```

main.cpp

Run

```cpp
//10.Pointer to a string

#include <iostream>
#include <string>

int main() {
    std::string str = "Hello, World!";
    std::string *ptr = &str; // Create a pointer to a string
    std::cout << "Value of str: " << str << std::endl;
    std::cout << "Value pointed by ptr: " << *ptr << std::endl;
    return 0;
}
```

Output

Clear

```
/tmp/7mUsOdIw29.o
Value of str: Hello, World!
Value pointed by ptr: Hello, World!
```

main.cpp

Run

```cpp
//11.Pointer to an array of elements

#include <iostream>

int main() {
    int arr[] = {1, 2, 3, 4, 5};
    int *ptr = arr; // Create a pointer to an array
    std::cout << "Value at the start of the array: " << *ptr << std::endl;
    std::cout << "Value at the end of the array: " << *(arr + 4) << std::endl;
    return 0;
}
```

Output

Clear

```
/tmp/7mUsOdIw29.o
Value at the start of the array: 1
Value at the end of the array: 5
```

main.cpp

Run

Output

Clear

```cpp
//12.Pointer to an array of characters

#include <iostream>

int main() {
    char arr[] = {'H', 'e', 'l', 'l', 'o', ',', ' ', 'W', 'o', 'r', 'l', 'd',
        '!'};
    char *ptr = arr; // Create a pointer to an array of characters
    std::cout << "Value at the start of the array: " << *ptr << std::endl;
    std::cout << "Value at the end of the array: " << *(arr + 12) << std::endl
        ;
    return 0;
}
```

```
/tmp/7mUsOdIw29.o
Value at the start of the array: H
Value at the end of the array: !
```

main.cpp

Run

```cpp
//13.Pointer to an array of floats

#include <iostream>

int main() {
    float arr[] = {1.1, 2.2, 3.3, 4.4, 5.5};
    float *ptr = arr; // Create a pointer to an array of floats
    std::cout << "Value at the start of the array: " << *ptr << std::endl;
    std::cout << "Value at the end of the array: " << *(arr + 4) << std::endl;
    return 0;
}
```

Output

Clear

```
/tmp/7mUsOdIw29.o
Value at the start of the array: 1.1
Value at the end of the array: 5.5
```

main.cpp

Run

```cpp
//14.Pointer to an object

#include <iostream>

class MyClass {
public:
    int a;
    float b;
    std::string c;
};

int main() {
    MyClass obj;
    obj.a = 10;
    obj.b = 10.5;
    obj.c = "Hello";
    MyClass *ptr = &obj;
    std::cout << "Value of obj.a: " << obj.a << std::endl;
    std::cout << "Value of obj.b: " << obj.b << std::endl;
    std::cout << "Value of obj.c: " << obj.c << std::endl;
    std::cout << "Value of ptr->a: " << ptr->a << std::endl;
    std::cout << "Value of ptr->b: " << ptr->b << std::endl;
    std::cout << "Value of ptr->c: " << ptr->c << std::endl;
    return 0;
}
```

Output

Clear

```
/tmp/7mUsOdIw29.o
Value of obj.a: 10
Value of obj.b: 10.5
Value of obj.c: Hello
Value of ptr->a: 10
Value of ptr->b: 10.5
Value of ptr->c: Hello
```

main.cpp

Run

Output

Clear

```cpp
//15.Pointer to a function:

#include <iostream>

int add(int a, int b) {
    return a + b;
}

int main() {
    int (*ptr)(int, int) = add; // Create a pointer to a function
    std::cout << "Sum of 10 and 5: " << ptr(10, 5) << std::endl;
    return 0;
}
```

```
/tmp/7mUsOdIw29.o
Sum of 10 and 5: 15
```