

Function Pointer Solutions

Function Pointer

- What is a function pointer?
- Write down the definition of a pointer to the following function

```
void func(int, int);  
auto func_ptr = &func;  
//void (* func_ptr )(int, int) = &func;
```

- Write down an alias to the type of func_ptr

```
using pfunc = void (*)(int, int);  
// typedef void (*)(int, int) pfunc;    // Older C++
```

Callable Object

- Explain briefly what is meant by "callable object"
 - A callable object has the properties of data. It can be copied, passed to functions, etc
 - However, it can also be called like a function

Passing a function pointer

- Write a simple program with
 - A function which returns a function pointer
 - A function which takes a function pointer as an argument
 - A main() function which calls both these functions