C Programming	C++ Programming

`#include <stdio.h>`
 	
`int main() {`
`  printf("Hello World!");`
`  return 0;`
`}`
	`#include <iostream>`
	`using namespace std;`
	
	`int main() {`
	`  cout << "Hello World!";`
	`  return 0;`
	`}`

#include <stdio.h>
 	
int main() {
// Create variables
int myNum = 15; // Integer (whole number)
float myFloatNum = 5.99; // Floating point number
char myLetter = 'D'; // Character
 	
// Print variables
printf("%d\n", myNum);
printf("%f\n", myFloatNum);
printf("%c\n", myLetter);
return 0;
}
	`#include <iostream>`
	`using namespace std;`
	
	`int main() {`
	`  int myNum = 5;`
	`// Integer (whole number without decimals)`
	`double myFloatNum = 5.99;`
	`// Floating point number (with decimals)`
	`char myLetter = 'D';`
	`// Character`
	`string myText = "Hello";`
	`// String (text)`
	`bool myBoolean = true;`
	`cout <<myNum << myFloatNum <<`
	`myLetter <<myText ;`
	`  return 0;`
	`}`

#include <stdio.h>
 	
int main() {
int x = 20;
int y = 18;
if (x > y) {
printf("x is greater than y");
}
return 0;
}
	`#include <iostream>`
	`using namespace std;`
	
	`int main() {`
	`  int x = 20;`
	`  int y = 18;`
	`  if (x > y) {`
	`  cout << "x is greater than y";`
	`  }`
	`  return 0;`
	`}`

```c
#include <stdio.h>

int main() {
  int day = 4;

  switch (day) {
    case 1:
      printf("Monday");
      break;
    case 2:
      printf("Tuesday");
      break;
    case 3:
      printf("Wednesday");
      break;
    case 4:
      printf("Thursday");
      break;
    case 5:
      printf("Friday");
      break;
    case 6:
      printf("Saturday");
      break;
    case 7:
      printf("Sunday");
      break;
  }

  return 0;
}
```

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

int main() {
  int day = 4;
  switch (day) {
  case 1:
    cout << "Monday";
    break;
  case 2:
    cout << "Tuesday";
    break;
  case 3:
    cout << "Wednesday";
    break;
  case 4:
    cout << "Thursday";
    break;
  case 5:
    cout << "Friday";
    break;
  case 6:
    cout << "Saturday";
    break;
  case 7:
    cout << "Sunday";
    break;
  }
  return 0;
}
```

```c
#include <stdio.h>

int main() {
  int i = 0;

  while (i < 5) {
    printf("%d\n", i);
    i++;
  }

  return 0;
}
```

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

int main() {
  int i = 0;
  while (i < 5) {
    cout << i << "\n";
    i++;
  }
  return 0;
}
```

#include <stdio.h>
 	
int main() {
  int i;
 	
  for (i = 0; i < 5; i++) {
  printf("%d\n", i);
  }
 	
  return 0;
}
	#include <iostream>
	using namespace std;
	
	int main() {
	  for (int i = 0; i < 5; i++) {
	  cout << i << "\n";
	  }
	  return 0;
	}

#include <stdio.h>
 	
int main() {
  int myNumbers[] = {25, 50, 75, 100};
  printf("%d", myNumbers[0]);
 	
  return 0;
}
	#include <iostream>
	#include <string>
	using namespace std;
	
	int main() {
	  string cars[4] = {"Volvo", "BMW",
	"Ford", "Mazda"};
	  cout << cars[0];
	  return 0;
	}

#include <stdio.h>
 	
int main() {
  char greetings[] = "Hello World!";
  printf("%s", greetings);
 	
  return 0;
}
	#include <iostream>
	#include <string>
	using namespace std;
	
	int main() {
	  string greeting = "Hello";
	  cout << greeting;
	  return 0;
	}

#include <stdio.h>
 	
// Create a function
void myFunction() {
  printf("I just got executed!");
}
 	
int main() {
  myFunction(); // call the function
  return 0;
}
	#include <iostream>
	using namespace std;
	
	void myFunction() {
	  cout << "I just got executed!";
	}
	
	int main() {
	  myFunction();
	  return 0;
	}

```c
#include <stdio.h>

// Create a structure called myStructure
struct myStructure {
  int myNum;
  char myLetter;
};

int main() {
  // Create a structure variable of myStructure called s1
  struct myStructure s1;

  // Assign values to members of s1
  s1.myNum = 13;
  s1.myLetter = 'B';

  // Print values
  printf("My number: %d\n", s1.myNum);
  printf("My letter: %c\n", s1.myLetter);

  return 0;
}
```

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

int main() {
  struct {
    int myNum;
    string myString;
  } myStructure;

  myStructure.myNum = 1;
  myStructure.myString = "Hello World!";

  cout << myStructure.myNum << "\n";
  cout << myStructure.myString << "\n";
  return 0;
}
```

```c
#include <stdio.h>

int main() {
  int myAge = 43;

  printf("%d\n", myAge);
  printf("%p\n", &myAge);
  return 0;
}
```

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

int main() {
  string food = "Pizza";

  cout << food << "\n";
  cout << &food << "\n";
  return 0;
}
```

```c
#include <stdio.h>

int main() {
  int myAge = 43;  // An int variable
  int* ptr = &myAge;  // A pointer variable, with the name ptr, that stores the address of myAge

  // Output the value of myAge (43)
  printf("%d\n", myAge);

  // Output the memory address of myAge (0x7ffe5367e044)
  printf("%p\n", &myAge);
```

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

int main() {
  string food = "Pizza";  // A string variable
  string* ptr = &food;  // A pointer variable that stores the address of food

  // Output the value of food
  cout << food << "\n";
```

```
  // Output the memory address of myAge with the pointer (0x7ffe5367e044)
  printf("%p\n", ptr);

  return 0;
}
```

```
  // Output the memory address of food
  cout << &food << "\n";

  // Output the memory address of food with the pointer
  cout << ptr << "\n";
  return 0;
}
```