# Exposure CS 2021 for CS1

# Chapter 11 Output Slides

## For Students

PowerPoint Presentation
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# Output Programs

**These slides will present a variety of small programs. Each program has a *compound condition* which uses the Boolean Logic that was introduced in this chapter.**

**Our concern will be with the output of each program, and more importantly, developing a way to determine program output correctly for programs that involve compound conditions.**

**You can expect that on quizzes and/or tests only a program segment or a subroutine is shown.**

# Teacher/Student Versions, Tablet PCs, and Inking

**The *"For Teachers"* version of this presentation has 2 slides for each program.**

**The first slide only shows the program.**
**The second shows the program, worked out solution, and output.**

**The *"For Students"* version only has 1 slide for each program with no provided solution or output. Students are expected to work out the solutions either on paper, or ideally they can "ink" directly on their laptops.**

```
1  # Output1101
2
3  print()
4  x = 10
5  y = 20
6  z = 30
7
8  if x < y or y > z:
9      print("Hello")
10 else:
11     print("Goodbye")
12
```

```
1  # Output1102
2
3  print()
4  x = 10
5  y = 20
6  z = 30
7
8  if x < y and y > z:
9      print("Hello")
10 else:
11     print("Goodbye")
12
```

```
1  # Output1103
2
3  print()
4  x = 10
5  y = 20
6  z = 30
7
8  if x > y or y > z:
9      print("Hello")
10 else:
11     print("Goodbye")
12
```

```
1  # Output1104
2
3  print()
4  x = 10
5  y = 20
6  z = 30
7
8  if x > y and y > z:
9      print("Hello")
10 else:
11     print("Goodbye")
12
```

```
1  # Output1105
2
3  print()
4  x = 10
5  y = 20
6  z = 30
7
8  if x < y or y < z:
9      print("Hello")
10 else:
11     print("Goodbye")
12
```

```
1  # Output1106
2
3  print()
4  x = 10
5  y = 20
6  z = 30
7
8  if x < y and y < z:
9      print("Hello")
10 else:
11     print("Goodbye")
12
```

```
1  # Output1107
2
3  print()
4  x = 10
5  y = 20
6  z = 30
7
8  if x < y < z:
9      print("Hello")
10 else:
11     print("Goodbye")
12
```

```
1  # Output1108
2
3  print()
4  x = 10
5  y = 20
6  z = 20
7
8  if x == y or y == z:
9      print("Hello")
10 else:
11     print("Goodbye")
12
```

```
1  # Output1109
2
3  print()
4  x = 10
5  y = 20
6  z = 20
7
8  if x == y and y == z:
9      print("Hello")
10 else:
11     print("Goodbye")
12
```

```
1  # Output1110
2
3  print()
4  x = 10
5  y = 20
6  z = 20
7
8  if not(x == y or y == z):
9      print("Hello")
10 else:
11     print("Goodbye")
12
```

```
1  # Output1111
2
3  print()
4  x = 10
5  y = 20
6  z = 20
7
8  if x != y or y != z:
9      print("Hello")
10 else:
11     print("Goodbye")
12
```

```
1  # Output1112
2
3  print()
4  x = 10
5  y = 20
6  z = 20
7
8  if x != y and y != z:
9      print("Hello")
10 else:
11     print("Goodbye")
12
```

```
1  # Output1113
2
3  print()
4  x = 20
5  y = 20
6  z = 20
7
8  if x > y > z:
9      print("Hello")
10 else:
11     print("Goodbye")
12
```

```
1  # Output1114
2
3  print()
4  x = 20
5  y = 20
6  z = 20
7
8  if x >= y >= z:
9      print("Hello")
10 else:
11     print("Goodbye")
12
```

```
1  # Output1115
2
3  print()
4  x = 20
5  y = 20
6  z = 20
7
8  if x == y == z:
9      print("Hello")
10 else:
11     print("Goodbye")
12
```

```
1  # Output1116
2
3  print()
4  x = 10
5  y = 20
6  z = 30
7
8  while x < y < z:
9      x += 1
10     z -= 1
11
12 print(x,y,z)
13
```

```
1  # Output1117
2
3  print()
4  x = 10
5  y = 20
6  z = 30
7
8  while x < y or y < z:
9      x += 3
10     z -= 2
11
12 print(x,y,z)
13
```

```
1  # Output1118
2
3  print()
4  x = 10
5  y = 20
6  z = 30
7
8  while x < y and y != z:
9      x *= 2
10     z -= 1
11
12 print(x,y,z)
13
```

```
1  # Output1119
2
3  print()
4  x = 10
5  y = 20
6  z = 30
7
8  while x < y or y != z:
9      x *= 2
10     z -= 5
11
12 print(x,y,z)
13
```

```
1  # Output1120
2
3  print()
4  x = 10
5  y = 20
6  z = 30
7
8  while x + y < z or x + y > z:
9      x *= 2
10     z -= 5
11
12 print(x,y,z)
13
```