

Survey #2 Answers

Q1: Three test cases are needed: one to run the body of the if part, one to run the body of the elif part, and one to run the body of the else part. It's impossible to run all of the statements with fewer than 3 test cases because the if-elif-else statement guarantees that exactly one of the three bodies executes.

Q2: Any set of three test cases that cause the if, elif and else parts to execute (including the body of the loop in the elif part) will work. One example of such test cases includes:

Test #1: $a = 0$, $b = 1$ (runs the body of the if part)

Test #2: $a = 1$, $b = 0$ (runs the body of the elif part, including one iteration of the for loop)

Test #3: $a = 0$, $b = 0$ (runs the body of the else part)

Q3: E

Q4: E (attempting to add a string to an integer will result in a type error)

Q5: A 2

Q6: A A B A A 18

Q7: A B A A A 22

Q8: 0

Q9:

```
a = int(input("Enter a: "))
b = int(input("Enter b: "))
total = 0
```

```
i = a
while i < b:
    if (i % 2) == 0:
        total = total + i
    else:
        total = total - i
```

```
    i = i + 3
```

```
print(total)
```

Q10:

```
000
001
010
011
100
101
110
111
```