

Tracing Algorithms

1. Complete the trace table for algorithm shown below. (4)

<pre> Start ← 1 End ← 4 FOR Index ← Start TO End OUTPUT Index*Index ENDFOR </pre>	Start	End	Index	Output

2. Complete the trace table for algorithm shown below. (3)

<pre> graph TD START([START]) --> Init[Count = 5 Target = 0] Init --> Decision{Is Count >= Target?} Decision -- Yes --> OutputCount[/OUTPUT Count/] OutputCount --> DecCount[Count = Count - 1] DecCount --> Decision Decision -- No --> OutputBlast[/OUTPUT "Blast Off!"/] OutputBlast --> END([END]) </pre>	Count	Target	Output

3. Complete the trace table for algorithm shown below. (5)

```
Answers ← [TRUE, TRUE, FALSE, FALSE, TRUE]
Responses ← [TRUE, FALSE, TRUE, FALSE, TRUE]

i ← 0
Score ← 0
Len ← LEN(Answers)

WHILE i < Len DO
    IF Answers[i] = Responses[i] THEN
        Score ← Score + 1
    END IF
    i ← i + 1
ENDWHILE
```

i	Score	Len	Answers[i]	Responses[i]