```
f = @(n) (1);
g = @(n) (n);
h = @(n) (n*n);
i = @(n) (n*n*n);

j = @(n) (log2(n));
k = @(n) (n * log2(n));

l = @(n) (2 ^ n);
m = @(n) (factorial(n));

subplot(2,3,1)
fplot(f, [0, 10])
hold on
fplot(g, [0, 10])
xlabel("input")
ylabel("Time complexity")
title("Big O(1) and O(n)")
hold off

subplot(2,3,2)
fplot(h, [0, 10])
xlabel("input")
ylabel("Time complexity")
title("Big O(n*n)")

subplot(2,3,3)
fplot(i, [0, 10])
xlabel("input")
ylabel("Time complexity")
title("Big O (n*n*n)")

subplot(2,3,4)
fplot(j, [0, 100000])
xlabel("input")
ylabel("Time complexity")
title("Big O (log n)")

subplot(2,3,5)
fplot(k, [0, 100])
xlabel("input")
ylabel("Time complexity")
title("Big O (n * log n)")

subplot(2,3,6)
fplot(l, [0, 5])
xlabel("input")
ylabel("Time complexity")
title("Big O (2^n)")
```

```
Warning: Function behaves unexpectedly on array inputs. To improve
 performance,
```

```
properly vectorize your function to return an output with the same size and
shape as the input arguments.
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```

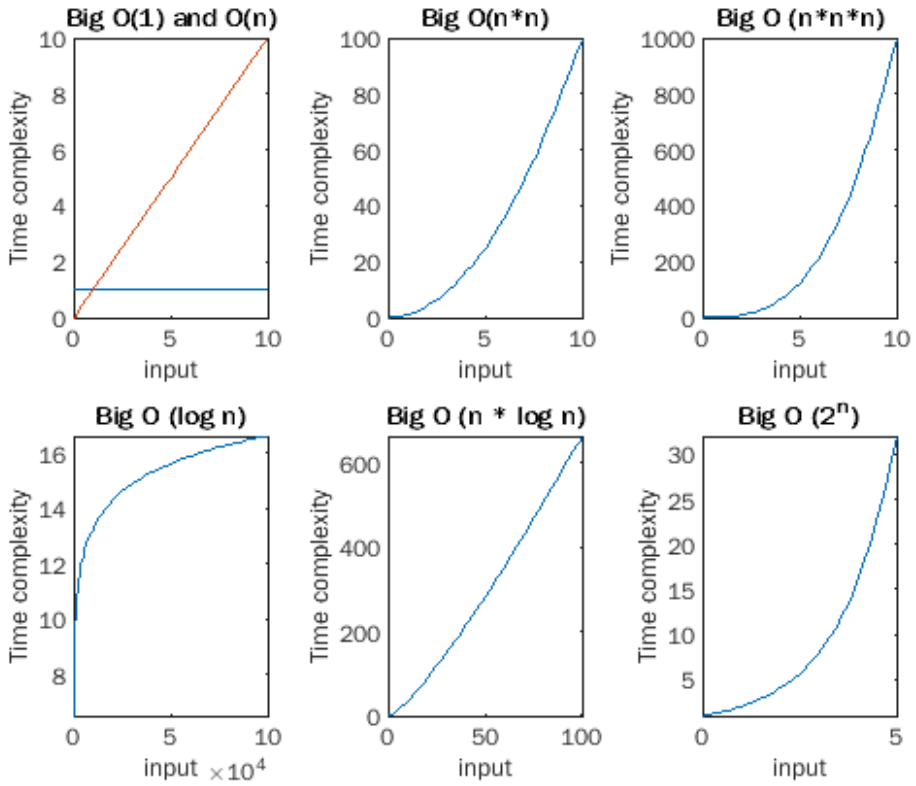

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