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Part A: Multiple Choice Questions

1) What will be the output of the following code snippet?
```
a = 15
b = 3
c = 4
result = a + b * c // (c % b) - 5
print(result)
```

a) 20
b) 22
c) 1
d) 0
Answer: 22 (Option b)

2) What will be the output of the following code?
```
import numpy as np
a = np.array([[1, 2], [3, 4]])
b = np.array([[5, 6], [7, 8]])
c = np.dot(a, b)
print(c)
```

a) [[21 32]]
b) [[19 22] [43 50]]
c) [[35 56]]
d) [[12 32]]
Answer: [[19 22] [43 50]] (Option b)

Part B: 5-Mark Questions

1) Explain with an example the difference between normal division (/) and floor division (//) in Python. Discuss the data type of the result in each case.
Answer: Normal division (/) always returns a float. For example, 7/2 = 3.5 (float). Floor division (//) returns the largest integer less than or equal to the division result. For example, 7//2 = 3 (int if both operands are int, otherwise float).

2) Consider the following code:
```
import numpy as np
a = np.array([[1, 2], [3, 4]])
b = np.array([[5, 6], [7, 8]])
c = np.dot(a, b)
print(c)
```

Answer: Matrix multiplication is performed:
[[1*5 + 2*7, 1*6 + 2*8],
[3*5 + 4*7, 3*6 + 4*8]] = [[19, 22], [43, 50]]
Hence, the output is:
[[19 22]
[43 50]]