Lab #33

Programming and Algorithms

Explain what each of the following list comprehensions do:

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| input\_array0 = [234, 75, 331, 73, 5]  output0 = [n\*n for n in input\_array0]  print("Output0 is", output0) |

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| input\_array1 = ["234", "75", "331", "73", "5"]  output1 = [n for n in input\_array1 if int(n) > 100]  print("Output1 is", output1) |

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| input\_array2 = [234, 75, 331, 73, 5]  output2 = [n for n in input\_array2 if n < 99]  print("Output2 is", output2) |

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| input\_array3 = [[234, 75], [331, 73], [5]]  output3 = [n for n in input\_array3 if len(n) > 1]  print("Output3 is", output3) |

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| input\_array4 = [[234, 75], [331, 73], [5]]  output4 = [print("n is", n) for n in input\_array4 if len(n) > 1]  print("Output4 is", output4) |

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| import math  input\_array5 = [1, 2, 4, 9, 16]  output5 = [n for n in input\_array5 if int(math.sqrt(n)) == math.sqrt(n)]  print("Output5 is", output5) |

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| e-mail me a completed solution to the above program in a Word document, and include Labs #25-32 in this document also.  e-mail to [Damian.Gordon@dit.ie](mailto:Damian.Gordon@dit.ie) with subject heading “DT255 PaA Lab #25-33” |