Lab #8

Programming and Algorithms

1. Take the existing Bubblesort code:

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| # PROGRAM Bubblesort:  Age = [44, 23, 42, 33, 18, 54, 34, 16]  for outerindex in range(0,len(Age)):  # DO  for index in range(0,len(Age)-1):  # DO  if Age[index+1] < Age[index]:  # THEN  TempValue = Age[index+1]  Age[index+1] = Age[index]  Age[index] = TempValue  # ENDIF;  # ENDFOR;  # ENDFOR;  print(Age)  # END. |

And add in a bit of error checking, so at the start of the code, add in:

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| ##################  # ERROR CHECKING #  ##################  c = str(input("Do you want error checking on? (y/n)"))  if c == 'y':  # THEN  MyErrorCheck = True  else:  MyErrorCheck = False  # ENDIF; |

And add in the following code at the swap in the code:

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| if MyErrorCheck == True:  # THEN  print(">> We are in cycle number:", outerindex)  print(Age)  print(">> We are swapping", Age[index], "at location", index, "with", Age[index+1],"at location",index+1 )  # ENDIF; |

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| e-mail me a completed solution to each of the above programs in a Word document, and include Lab #1-7 in this document also.  e-mail to [Damian.X.Gordon@TUDublin.ie](mailto:Damian.Gordon@dit.ie) with subject heading “DT249 PaA Lab #1-8” |