

# COMP 543 Assignment #6

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## Task 0

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Step 9980 Loss 0.83031046 Correct 63 out of 100
Step 9981 Loss 0.88253516 Correct 55 out of 100
Step 9982 Loss 0.84834176 Correct 61 out of 100
Step 9983 Loss 0.97256446 Correct 50 out of 100
Step 9984 Loss 0.9412961 Correct 45 out of 100
Step 9985 Loss 0.86145097 Correct 57 out of 100
Step 9986 Loss 0.9015347 Correct 52 out of 100
Step 9987 Loss 0.8869997 Correct 55 out of 100
Step 9988 Loss 0.9154425 Correct 55 out of 100
Step 9989 Loss 0.9613373 Correct 64 out of 100
Step 9990 Loss 0.9907227 Correct 46 out of 100
Step 9991 Loss 0.8676393 Correct 59 out of 100
Step 9992 Loss 0.8615558 Correct 48 out of 100
Step 9993 Loss 0.89032483 Correct 52 out of 100
Step 9994 Loss 0.9037895 Correct 58 out of 100
Step 9995 Loss 0.86681384 Correct 58 out of 100
Step 9996 Loss 0.87973106 Correct 55 out of 100
Step 9997 Loss 0.9206595 Correct 50 out of 100
Step 9998 Loss 0.834583 Correct 60 out of 100
Step 9999 Loss 1.0490689 Correct 55 out of 100
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## Task 1

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Step 9980 Loss 0.9210417 Correct 54 out of 100
Step 9981 Loss 0.85197693 Correct 60 out of 100
Step 9982 Loss 0.85860795 Correct 50 out of 100
Step 9983 Loss 0.9743702 Correct 46 out of 100
Step 9984 Loss 0.84544075 Correct 60 out of 100
Step 9985 Loss 0.96265966 Correct 48 out of 100
Step 9986 Loss 0.85310227 Correct 51 out of 100
Step 9987 Loss 0.828234 Correct 56 out of 100
Step 9988 Loss 0.9069025 Correct 54 out of 100
Step 9989 Loss 0.8483139 Correct 60 out of 100
Step 9990 Loss 0.8747006 Correct 61 out of 100
Step 9991 Loss 0.93035716 Correct 51 out of 100
Step 9992 Loss 0.9975557 Correct 54 out of 100
Step 9993 Loss 0.9088292 Correct 54 out of 100
Step 9994 Loss 0.93147576 Correct 60 out of 100
Step 9995 Loss 0.88366514 Correct 58 out of 100
Step 9996 Loss 0.9009989 Correct 52 out of 100
Step 9997 Loss 0.9731272 Correct 48 out of 100
Step 9998 Loss 0.90365416 Correct 53 out of 100
Step 9999 Loss 0.9417849 Correct 45 out of 100
Loss for 3000 randomly chosen document is 0.9182356317838032
Number correct labels is 1592 out of 3000
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## Task 2

Step 9980 Loss 0.33115527 Correct 87 out of 100  
Step 9981 Loss 0.18987413 Correct 93 out of 100  
Step 9982 Loss 0.14269015 Correct 98 out of 100  
Step 9983 Loss 0.21877868 Correct 91 out of 100  
Step 9984 Loss 0.26648048 Correct 92 out of 100  
Step 9985 Loss 0.21701124 Correct 94 out of 100  
Step 9986 Loss 0.20517126 Correct 94 out of 100  
Step 9987 Loss 0.41115597 Correct 85 out of 100  
Step 9988 Loss 0.21479738 Correct 92 out of 100  
Step 9989 Loss 0.306438 Correct 89 out of 100  
Step 9990 Loss 0.15012266 Correct 96 out of 100  
Step 9991 Loss 0.18325178 Correct 95 out of 100  
Step 9992 Loss 0.34344253 Correct 90 out of 100  
Step 9993 Loss 0.35651368 Correct 85 out of 100  
Step 9994 Loss 0.16399509 Correct 96 out of 100  
Step 9995 Loss 0.21832389 Correct 94 out of 100  
Step 9996 Loss 0.25723985 Correct 91 out of 100  
Step 9997 Loss 0.23169598 Correct 91 out of 100  
Step 9998 Loss 0.3255719 Correct 90 out of 100  
Step 9999 Loss 0.22117 Correct 91 out of 100  
Loss for 3000 randomly chosen document is 0.2620669575408101  
Number correct labels is 2735 out of 3000

## Task 3

Step 9980 Loss 0.00791325 Correct 100 out of 100  
Step 9981 Loss 0.014735184 Correct 100 out of 100  
Step 9982 Loss 0.028732497 Correct 99 out of 100  
Step 9983 Loss 0.019883169 Correct 100 out of 100  
Step 9984 Loss 0.014274009 Correct 100 out of 100  
Step 9985 Loss 0.004455964 Correct 100 out of 100  
Step 9986 Loss 0.012244108 Correct 100 out of 100  
Step 9987 Loss 0.0040809675 Correct 100 out of 100  
Step 9988 Loss 0.014213974 Correct 100 out of 100  
Step 9989 Loss 0.009057531 Correct 100 out of 100  
Step 9990 Loss 0.0075371633 Correct 100 out of 100  
Step 9991 Loss 0.005597413 Correct 100 out of 100  
Step 9992 Loss 0.0061460137 Correct 100 out of 100  
Step 9993 Loss 0.046522655 Correct 98 out of 100  
Step 9994 Loss 0.006838733 Correct 100 out of 100  
Step 9995 Loss 0.0075598 Correct 100 out of 100  
Step 9996 Loss 0.0049642604 Correct 100 out of 100  
Step 9997 Loss 0.0048496802 Correct 100 out of 100  
Step 9998 Loss 0.01088872 Correct 100 out of 100  
Step 9999 Loss 0.023850618 Correct 99 out of 100  
Loss for 3000 randomly chosen document is 0.2857981485625108  
Number correct labels is 2774 out of 3000

## Task 4

Step 9980 Loss 0.37380725 Correct 82 out of 100

Step 9981 Loss 0.36731082 Correct 84 out of 100  
Step 9982 Loss 0.3717711 Correct 86 out of 100  
Step 9983 Loss 0.38769874 Correct 85 out of 100  
Step 9984 Loss 0.39918938 Correct 85 out of 100  
Step 9985 Loss 0.3845336 Correct 85 out of 100  
Step 9986 Loss 0.46558964 Correct 83 out of 100  
Step 9987 Loss 0.4393242 Correct 82 out of 100  
Step 9988 Loss 0.37304795 Correct 86 out of 100  
Step 9989 Loss 0.42103586 Correct 83 out of 100  
Step 9990 Loss 0.41751948 Correct 81 out of 100  
Step 9991 Loss 0.3965334 Correct 92 out of 100  
Step 9992 Loss 0.297927 Correct 92 out of 100  
Step 9993 Loss 0.32648578 Correct 86 out of 100  
Step 9994 Loss 0.3681673 Correct 88 out of 100  
Step 9995 Loss 0.44409966 Correct 79 out of 100  
Step 9996 Loss 0.34715253 Correct 85 out of 100  
Step 9997 Loss 0.41277254 Correct 83 out of 100  
Step 9998 Loss 0.42153808 Correct 87 out of 100  
Step 9999 Loss 0.53634745 Correct 76 out of 100  
Loss for 3000 randomly chosen document is 0.7054825365543365  
Number correct labels is 2074 out of 3000