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Training for 3000000 steps ...
Interval 1 (0 steps performed)
10000/10000 [=====] - 25s 2ms/step - reward: -0.0240
11 episodes - episode_reward: -20.636 [-21.000, -20.000] - ale.lives: 0.000

Interval 2 (10000 steps performed)
10000/10000 [=====] - 62s 6ms/step - reward: -0.0211
11 episodes - episode_reward: -20.364 [-21.000, -19.000] - loss: 0.008 - mean_absolute_error: 0.097 - mean_q: -0.083 - mean_eps: 0.853 - ale.lives: 0.000

Interval 3 (20000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: -0.0223
10 episodes - episode_reward: -20.400 [-21.000, -19.000] - loss: 0.005 - mean_absolute_error: 0.198 - mean_q: -0.202 - mean_eps: 0.755 - ale.lives: 0.000

Interval 4 (30000 steps performed)
10000/10000 [=====] - 60s 6ms/step - reward: -0.0225
11 episodes - episode_reward: -20.364 [-21.000, -18.000] - loss: 0.003 - mean_absolute_error: 0.263 - mean_q: -0.276 - mean_eps: 0.657 - ale.lives: 0.000

Interval 5 (40000 steps performed)
10000/10000 [=====] - 60s 6ms/step - reward: -0.0234
12 episodes - episode_reward: -20.667 [-21.000, -18.000] - loss: 0.004 - mean_absolute_error: 0.293 - mean_q: -0.312 - mean_eps: 0.559 - ale.lives: 0.000

Interval 6 (50000 steps performed)
10000/10000 [=====] - 60s 6ms/step - reward: -0.0241
11 episodes - episode_reward: -20.636 [-21.000, -19.000] - loss: 0.003 - mean_absolute_error: 0.384 - mean_q: -0.435 - mean_eps: 0.461 - ale.lives: 0.000

Interval 7 (60000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: -0.0244
12 episodes - episode_reward: -20.750 [-21.000, -19.000] - loss: 0.003 - mean_absolute_error: 0.470 - mean_q: -0.543 - mean_eps: 0.363 - ale.lives: 0.000

Interval 8 (70000 steps performed)
10000/10000 [=====] - 60s 6ms/step - reward: -0.0222
11 episodes - episode_reward: -20.182 [-21.000, -19.000] - loss: 0.003 - mean_absolute_error: 0.549 - mean_q: -0.636 - mean_eps: 0.265 - ale.lives: 0.000

Interval 9 (80000 steps performed)
10000/10000 [=====] - 60s 6ms/step - reward: -0.0212
11 episodes - episode_reward: -20.182 [-21.000, -18.000] - loss: 0.004 - mean_absolute_error: 0.620 - mean_q: -0.717 - mean_eps: 0.167 - ale.lives: 0.000

Interval 10 (90000 steps performed)
10000/10000 [=====] - 60s 6ms/step - reward: -0.0199
10 episodes - episode_reward: -19.800 [-21.000, -18.000] - loss: 0.005 - mean_absolute_error: 0.699 - mean_q: -0.809 - mean_eps: 0.069 - ale.lives: 0.000

Interval 11 (100000 steps performed)
10000/10000 [=====] - 62s 6ms/step - reward: -0.0190
9 episodes - episode_reward: -19.778 [-21.000, -19.000] - loss: 0.004 - mean_absolute_error: 0.770 - mean_q: -0.890 - mean_eps: 0.020 - ale.lives: 0.000

Interval 12 (110000 steps performed)
10000/10000 [=====] - 63s 6ms/step - reward: -0.0168
9 episodes - episode_reward: -19.444 [-21.000, -18.000] - loss: 0.005 - mean_absolute_error: 0.833 - mean_q: -0.959 - mean_eps: 0.020 - ale.lives: 0.000

Interval 13 (120000 steps performed)
10000/10000 [=====] - 64s 6ms/step - reward: -0.0135
7 episodes - episode_reward: -18.286 [-21.000, -16.000] - loss: 0.005 - mean_absolute_error: 0.843 - mean_q: -0.967 - mean_eps: 0.020 - ale.lives: 0.000

Interval 14 (130000 steps performed)
10000/10000 [=====] - 62s 6ms/step - reward: -0.0123
7 episodes - episode_reward: -18.714 [-21.000, -16.000] - loss: 0.005 - mean_absolute_error: 0.850 - mean_q: -0.970 - mean_eps: 0.020 - ale.lives: 0.000

Interval 15 (140000 steps performed)
10000/10000 [=====] - 62s 6ms/step - reward: -0.0087
6 episodes - episode_reward: -15.667 [-18.000, -13.000] - loss: 0.005 - mean_absolute_error: 0.802 - mean_q: -0.912 - mean_eps: 0.020 - ale.lives: 0.000

Interval 16 (150000 steps performed)
10000/10000 [=====] - 62s 6ms/step - reward: -0.0101
6 episodes - episode_reward: -17.333 [-18.000, -15.000] - loss: 0.005 - mean_absolute_error: 0.742 - mean_q: -0.842 - mean_eps: 0.020 - ale.lives: 0.000

Interval 17 (160000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: -0.0079
5 episodes - episode_reward: -15.000 [-16.000, -14.000] - loss: 0.005 - mean_absolute_error: 0.674 - mean_q: -0.754 - mean_eps: 0.020 - ale.lives: 0.000

Interval 18 (170000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: -0.0068
5 episodes - episode_reward: -14.200 [-17.000, -11.000] - loss: 0.004 - mean_absolute_error: 0.644 - mean_q: -0.713 - mean_eps: 0.020 - ale.lives: 0.000

Interval 19 (180000 steps performed)
10000/10000 [=====] - 60s 6ms/step - reward: -0.0094
5 episodes - episode_reward: -16.400 [-19.000, -13.000] - loss: 0.005 - mean_absolute_error: 0.652 - mean_q: -0.714 - mean_eps: 0.020 - ale.lives: 0.000

Interval 20 (190000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: -0.0069
5 episodes - episode_reward: -15.000 [-18.000, -12.000] - loss: 0.005 - mean_absolute_error: 0.623 - mean_q: -0.679 - mean_eps: 0.020 - ale.lives: 0.000

Interval 21 (200000 steps performed)
10000/10000 [=====] - 60s 6ms/step - reward: -0.0088
6 episodes - episode_reward: -15.333 [-18.000, -12.000] - loss: 0.005 - mean_absolute_error: 0.567 - mean_q: -0.613 - mean_eps: 0.020 - ale.lives: 0.000

Interval 22 (210000 steps performed)
10000/10000 [=====] - 60s 6ms/step - reward: -0.0082
5 episodes - episode_reward: -15.800 [-20.000, -13.000] - loss: 0.004 - mean_absolute_error: 0.567 - mean_q: -0.606 - mean_eps: 0.020 - ale.lives: 0.000

Interval 23 (220000 steps performed)
10000/10000 [=====] - 60s 6ms/step - reward: -0.0099
6 episodes - episode_reward: -16.333 [-18.000, -15.000] - loss: 0.005 - mean_absolute_error: 0.567 - mean_q: -0.596 - mean_eps: 0.020 - ale.lives: 0.000

Interval 24 (230000 steps performed)
10000/10000 [=====] - 60s 6ms/step - reward: -0.0068
5 episodes - episode_reward: -14.400 [-17.000, -13.000] - loss: 0.005 - mean_absolute_error: 0.544 - mean_q: -0.573 - mean_eps: 0.020 - ale.lives: 0.000

Interval 25 (240000 steps performed)
10000/10000 [=====] - 60s 6ms/step - reward: -0.0068
4 episodes - episode_reward: -15.250 [-16.000, -13.000] - loss: 0.004 - mean_absolute_error: 0.518 - mean_q: -0.542 - mean_eps: 0.020 - ale.lives: 0.000

Interval 26 (250000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: -0.0045
4 episodes - episode_reward: -13.000 [-14.000, -10.000] - loss: 0.004 - mean_absolute_error: 0.513 - mean_q: -0.534 - mean_eps: 0.020 - ale.lives: 0.000

Interval 27 (260000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: -0.0068
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5 episodes - episode_reward: -13.600 [-17.000, -10.000] - loss: 0.005 - mean_absolute_error: 0.445 - mean_q: -0.440 - mean_eps: 0.020 - ale.lives: 0.000

Interval 28 (270000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: -0.0050
4 episodes - episode_reward: -12.250 [-18.000, -7.000] - loss: 0.005 - mean_absolute_error: 0.412 - mean_q: -0.394 - mean_eps: 0.020 - ale.lives: 0.000

Interval 29 (280000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: -0.0067
5 episodes - episode_reward: -14.000 [-17.000, -12.000] - loss: 0.005 - mean_absolute_error: 0.364 - mean_q: -0.338 - mean_eps: 0.020 - ale.lives: 0.000

Interval 30 (290000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: -0.0061
4 episodes - episode_reward: -13.750 [-16.000, -10.000] - loss: 0.004 - mean_absolute_error: 0.350 - mean_q: -0.322 - mean_eps: 0.020 - ale.lives: 0.000

Interval 31 (300000 steps performed)
10000/10000 [=====] - 62s 6ms/step - reward: -0.0061
5 episodes - episode_reward: -13.400 [-17.000, -10.000] - loss: 0.005 - mean_absolute_error: 0.363 - mean_q: -0.332 - mean_eps: 0.020 - ale.lives: 0.000

Interval 32 (310000 steps performed)
10000/10000 [=====] - 62s 6ms/step - reward: -0.0063
4 episodes - episode_reward: -15.250 [-18.000, -13.000] - loss: 0.004 - mean_absolute_error: 0.396 - mean_q: -0.368 - mean_eps: 0.020 - ale.lives: 0.000

Interval 33 (320000 steps performed)
10000/10000 [=====] - 60s 6ms/step - reward: -0.0040
4 episodes - episode_reward: -10.500 [-12.000, -9.000] - loss: 0.004 - mean_absolute_error: 0.408 - mean_q: -0.377 - mean_eps: 0.020 - ale.lives: 0.000

Interval 34 (330000 steps performed)
10000/10000 [=====] - 60s 6ms/step - reward: -0.0042
4 episodes - episode_reward: -10.250 [-12.000, -9.000] - loss: 0.004 - mean_absolute_error: 0.396 - mean_q: -0.319 - mean_eps: 0.020 - ale.lives: 0.000

Interval 35 (340000 steps performed)
10000/10000 [=====] - 60s 6ms/step - reward: -0.0038
3 episodes - episode_reward: -9.667 [-15.000, -2.000] - loss: 0.005 - mean_absolute_error: 0.385 - mean_q: -0.309 - mean_eps: 0.020 - ale.lives: 0.000

Interval 36 (350000 steps performed)
10000/10000 [=====] - 60s 6ms/step - reward: -0.0031
4 episodes - episode_reward: -10.500 [-12.000, -7.000] - loss: 0.004 - mean_absolute_error: 0.354 - mean_q: -0.285 - mean_eps: 0.020 - ale.lives: 0.000

Interval 37 (360000 steps performed)
10000/10000 [=====] - 60s 6ms/step - reward: -0.0033
3 episodes - episode_reward: -8.333 [-13.000, -4.000] - loss: 0.004 - mean_absolute_error: 0.317 - mean_q: -0.233 - mean_eps: 0.020 - ale.lives: 0.000

Interval 38 (370000 steps performed)
10000/10000 [=====] - 60s 6ms/step - reward: -0.0039
4 episodes - episode_reward: -9.500 [-12.000, -8.000] - loss: 0.004 - mean_absolute_error: 0.300 - mean_q: -0.223 - mean_eps: 0.020 - ale.lives: 0.000

Interval 39 (380000 steps performed)
10000/10000 [=====] - 60s 6ms/step - reward: -0.0041
4 episodes - episode_reward: -10.750 [-15.000, -5.000] - loss: 0.004 - mean_absolute_error: 0.277 - mean_q: -0.179 - mean_eps: 0.020 - ale.lives: 0.000

Interval 40 (390000 steps performed)
10000/10000 [=====] - 60s 6ms/step - reward: -0.0031
4 episodes - episode_reward: -9.500 [-13.000, -5.000] - loss: 0.004 - mean_absolute_error: 0.270 - mean_q: -0.153 - mean_eps: 0.020 - ale.lives: 0.000

Interval 41 (400000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: -0.0037
3 episodes - episode_reward: -9.667 [-11.000, -9.000] - loss: 0.004 - mean_absolute_error: 0.272 - mean_q: -0.153 - mean_eps: 0.020 - ale.lives: 0.000

Interval 42 (410000 steps performed)
10000/10000 [=====] - 64s 6ms/step - reward: -0.0029
4 episodes - episode_reward: -9.750 [-13.000, -4.000] - loss: 0.005 - mean_absolute_error: 0.260 - mean_q: -0.138 - mean_eps: 0.020 - ale.lives: 0.000

Interval 43 (420000 steps performed)
10000/10000 [=====] - 64s 6ms/step - reward: -0.0032
3 episodes - episode_reward: -7.667 [-13.000, -3.000] - loss: 0.004 - mean_absolute_error: 0.246 - mean_q: -0.096 - mean_eps: 0.020 - ale.lives: 0.000

Interval 44 (430000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: -0.0038
4 episodes - episode_reward: -10.250 [-11.000, -10.000] - loss: 0.004 - mean_absolute_error: 0.230 - mean_q: -0.082 - mean_eps: 0.020 - ale.lives: 0.000

Interval 45 (440000 steps performed)
10000/10000 [=====] - 59s 6ms/step - reward: -0.0033
3 episodes - episode_reward: -10.333 [-14.000, -7.000] - loss: 0.004 - mean_absolute_error: 0.215 - mean_q: -0.074 - mean_eps: 0.020 - ale.lives: 0.000

Interval 46 (450000 steps performed)
10000/10000 [=====] - 59s 6ms/step - reward: -0.0026
4 episodes - episode_reward: -7.750 [-13.000, -2.000] - loss: 0.004 - mean_absolute_error: 0.231 - mean_q: -0.075 - mean_eps: 0.020 - ale.lives: 0.000

Interval 47 (460000 steps performed)
10000/10000 [=====] - 60s 6ms/step - reward: -0.0032
3 episodes - episode_reward: -8.333 [-11.000, -6.000] - loss: 0.005 - mean_absolute_error: 0.237 - mean_q: -0.072 - mean_eps: 0.020 - ale.lives: 0.000

Interval 48 (470000 steps performed)
10000/10000 [=====] - 60s 6ms/step - reward: -0.0049
5 episodes - episode_reward: -10.400 [-14.000, -8.000] - loss: 0.004 - mean_absolute_error: 0.247 - mean_q: -0.058 - mean_eps: 0.020 - ale.lives: 0.000

Interval 49 (480000 steps performed)
10000/10000 [=====] - 59s 6ms/step - reward: -0.0042
4 episodes - episode_reward: -12.000 [-14.000, -10.000] - loss: 0.004 - mean_absolute_error: 0.249 - mean_q: -0.100 - mean_eps: 0.020 - ale.lives: 0.000

Interval 50 (490000 steps performed)
10000/10000 [=====] - 60s 6ms/step - reward: -0.0048
4 episodes - episode_reward: -11.500 [-15.000, -9.000] - loss: 0.005 - mean_absolute_error: 0.268 - mean_q: -0.121 - mean_eps: 0.020 - ale.lives: 0.000

Interval 51 (500000 steps performed)
10000/10000 [=====] - 59s 6ms/step - reward: -0.0027
3 episodes - episode_reward: -8.000 [-11.000, -5.000] - loss: 0.004 - mean_absolute_error: 0.270 - mean_q: -0.131 - mean_eps: 0.020 - ale.lives: 0.000

Interval 52 (510000 steps performed)
10000/10000 [=====] - 59s 6ms/step - reward: -0.0037
4 episodes - episode_reward: -10.500 [-13.000, -6.000] - loss: 0.005 - mean_absolute_error: 0.268 - mean_q: -0.122 - mean_eps: 0.020 - ale.lives: 0.000

Interval 53 (520000 steps performed)
10000/10000 [=====] - 59s 6ms/step - reward: -0.0050
4 episodes - episode_reward: -11.250 [-15.000, -8.000] - loss: 0.005 - mean_absolute_error: 0.265 - mean_q: -0.134 - mean_eps: 0.020 - ale.lives: 0.000

Interval 54 (530000 steps performed)
10000/10000 [=====] - 59s 6ms/step - reward: -0.0023
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4 episodes - episode_reward: -6.750 [-10.000, -5.000] - loss: 0.004 - mean_absolute_error: 0.260 - mean_q: -0.104 - mean_eps: 0.020 - ale.lives: 0.000

Interval 55 (540000 steps performed)
10000/10000 [=====] - 59s 6ms/step - reward: -0.0024
3 episodes - episode_reward: -7.000 [-7.000, -7.000] - loss: 0.004 - mean_absolute_error: 0.255 - mean_q: -0.068 - mean_eps: 0.020 - ale.lives: 0.000

Interval 56 (550000 steps performed)
10000/10000 [=====] - 59s 6ms/step - reward: -0.0037
4 episodes - episode_reward: -10.000 [-12.000, -8.000] - loss: 0.004 - mean_absolute_error: 0.244 - mean_q: -0.049 - mean_eps: 0.020 - ale.lives: 0.000

Interval 57 (560000 steps performed)
10000/10000 [=====] - 59s 6ms/step - reward: -0.0033
3 episodes - episode_reward: -10.000 [-10.000, -10.000] - loss: 0.004 - mean_absolute_error: 0.242 - mean_q: -0.041 - mean_eps: 0.020 - ale.lives: 0.000

Interval 58 (570000 steps performed)
10000/10000 [=====] - 60s 6ms/step - reward: -0.0032
4 episodes - episode_reward: -7.500 [-10.000, -6.000] - loss: 0.005 - mean_absolute_error: 0.252 - mean_q: -0.032 - mean_eps: 0.020 - ale.lives: 0.000

Interval 59 (580000 steps performed)
10000/10000 [=====] - 59s 6ms/step - reward: -0.0016
3 episodes - episode_reward: -5.000 [-13.000, 6.000] - loss: 0.004 - mean_absolute_error: 0.248 - mean_q: -0.041 - mean_eps: 0.020 - ale.lives: 0.000

Interval 60 (590000 steps performed)
10000/10000 [=====] - 60s 6ms/step - reward: -0.0055
5 episodes - episode_reward: -12.200 [-14.000, -11.000] - loss: 0.005 - mean_absolute_error: 0.245 - mean_q: -0.057 - mean_eps: 0.020 - ale.lives: 0.000

Interval 61 (600000 steps performed)
10000/10000 [=====] - 60s 6ms/step - reward: -0.0031
3 episodes - episode_reward: -9.000 [-11.000, -6.000] - loss: 0.004 - mean_absolute_error: 0.232 - mean_q: -0.049 - mean_eps: 0.020 - ale.lives: 0.000

Interval 62 (610000 steps performed)
10000/10000 [=====] - 60s 6ms/step - reward: -9.0000e-04
3 episodes - episode_reward: -5.333 [-9.000, -3.000] - loss: 0.004 - mean_absolute_error: 0.226 - mean_q: -0.045 - mean_eps: 0.020 - ale.lives: 0.000

Interval 63 (620000 steps performed)
10000/10000 [=====] - 60s 6ms/step - reward: -7.0000e-04
3 episodes - episode_reward: -1.333 [-8.000, 5.000] - loss: 0.004 - mean_absolute_error: 0.215 - mean_q: -0.005 - mean_eps: 0.020 - ale.lives: 0.000

Interval 64 (630000 steps performed)
10000/10000 [=====] - 60s 6ms/step - reward: -9.0000e-04
3 episodes - episode_reward: -4.000 [-10.000, 4.000] - loss: 0.004 - mean_absolute_error: 0.232 - mean_q: 0.082 - mean_eps: 0.020 - ale.lives: 0.000

Interval 65 (640000 steps performed)
10000/10000 [=====] - 60s 6ms/step - reward: -5.0000e-04
3 episodes - episode_reward: -0.667 [-5.000, 7.000] - loss: 0.004 - mean_absolute_error: 0.260 - mean_q: 0.140 - mean_eps: 0.020 - ale.lives: 0.000

Interval 66 (650000 steps performed)
10000/10000 [=====] - 60s 6ms/step - reward: 0.0014
3 episodes - episode_reward: 4.667 [3.000, 6.000] - loss: 0.004 - mean_absolute_error: 0.264 - mean_q: 0.188 - mean_eps: 0.020 - ale.lives: 0.000

Interval 67 (660000 steps performed)
10000/10000 [=====] - 60s 6ms/step - reward: 0.0020
3 episodes - episode_reward: 7.000 [-1.000, 12.000] - loss: 0.004 - mean_absolute_error: 0.284 - mean_q: 0.238 - mean_eps: 0.020 - ale.lives: 0.000

Interval 68 (670000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: -0.0022
3 episodes - episode_reward: -7.667 [-10.000, -6.000] - loss: 0.004 - mean_absolute_error: 0.281 - mean_q: 0.226 - mean_eps: 0.020 - ale.lives: 0.000

Interval 69 (680000 steps performed)
10000/10000 [=====] - 60s 6ms/step - reward: 5.0000e-04
3 episodes - episode_reward: 2.000 [-8.000, 7.000] - loss: 0.004 - mean_absolute_error: 0.290 - mean_q: 0.237 - mean_eps: 0.020 - ale.lives: 0.000

Interval 70 (690000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: 0.0014
3 episodes - episode_reward: 4.667 [2.000, 8.000] - loss: 0.003 - mean_absolute_error: 0.299 - mean_q: 0.262 - mean_eps: 0.020 - ale.lives: 0.000

Interval 71 (700000 steps performed)
10000/10000 [=====] - 62s 6ms/step - reward: 0.0011
3 episodes - episode_reward: 2.667 [-7.000, 8.000] - loss: 0.004 - mean_absolute_error: 0.295 - mean_q: 0.287 - mean_eps: 0.020 - ale.lives: 0.000

Interval 72 (710000 steps performed)
10000/10000 [=====] - 62s 6ms/step - reward: 0.0030
3 episodes - episode_reward: 10.333 [1.000, 16.000] - loss: 0.003 - mean_absolute_error: 0.308 - mean_q: 0.306 - mean_eps: 0.020 - ale.lives: 0.000

Interval 73 (720000 steps performed)
10000/10000 [=====] - 62s 6ms/step - reward: -0.0017
3 episodes - episode_reward: -4.000 [-8.000, 3.000] - loss: 0.003 - mean_absolute_error: 0.305 - mean_q: 0.297 - mean_eps: 0.020 - ale.lives: 0.000

Interval 74 (730000 steps performed)
10000/10000 [=====] - 60s 6ms/step - reward: 0.0015
3 episodes - episode_reward: 1.000 [-8.000, 9.000] - loss: 0.004 - mean_absolute_error: 0.294 - mean_q: 0.264 - mean_eps: 0.020 - ale.lives: 0.000

Interval 75 (740000 steps performed)
10000/10000 [=====] - 60s 6ms/step - reward: 0.0026
3 episodes - episode_reward: 13.000 [12.000, 14.000] - loss: 0.003 - mean_absolute_error: 0.328 - mean_q: 0.346 - mean_eps: 0.020 - ale.lives: 0.000

Interval 76 (750000 steps performed)
10000/10000 [=====] - 60s 6ms/step - reward: 0.0017
3 episodes - episode_reward: 1.333 [-4.000, 9.000] - loss: 0.003 - mean_absolute_error: 0.320 - mean_q: 0.336 - mean_eps: 0.020 - ale.lives: 0.000

Interval 77 (760000 steps performed)
10000/10000 [=====] - 59s 6ms/step - reward: -6.0000e-04
3 episodes - episode_reward: -2.333 [-11.000, 5.000] - loss: 0.003 - mean_absolute_error: 0.315 - mean_q: 0.343 - mean_eps: 0.020 - ale.lives: 0.000

Interval 78 (770000 steps performed)
10000/10000 [=====] - 60s 6ms/step - reward: 6.0000e-04
3 episodes - episode_reward: 3.333 [-3.000, 10.000] - loss: 0.004 - mean_absolute_error: 0.335 - mean_q: 0.347 - mean_eps: 0.020 - ale.lives: 0.000

Interval 79 (780000 steps performed)
10000/10000 [=====] - 60s 6ms/step - reward: 9.0000e-04
4 episodes - episode_reward: 4.250 [-4.000, 17.000] - loss: 0.003 - mean_absolute_error: 0.349 - mean_q: 0.380 - mean_eps: 0.020 - ale.lives: 0.000

Interval 80 (790000 steps performed)
10000/10000 [=====] - 60s 6ms/step - reward: -0.0014
2 episodes - episode_reward: -8.500 [-15.000, -2.000] - loss: 0.003 - mean_absolute_error: 0.322 - mean_q: 0.316 - mean_eps: 0.020 - ale.lives: 0.000

Interval 81 (800000 steps performed)
10000/10000 [=====] - 59s 6ms/step - reward: 0.0020
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3 episodes - episode_reward: 4.000 [-1.000, 8.000] - loss: 0.003 - mean_absolute_error: 0.293 - mean_q: 0.287 - mean_eps: 0.020 - ale.lives: 0.000

Interval 82 (810000 steps performed)
10000/10000 [=====] - 60s 6ms/step - reward: 0.0035
4 episodes - episode_reward: 11.250 [6.000, 16.000] - loss: 0.002 - mean_absolute_error: 0.370 - mean_q: 0.419 - mean_eps: 0.020 - ale.lives: 0.000

Interval 83 (820000 steps performed)
10000/10000 [=====] - 60s 6ms/step - reward: -9.0000e-04
2 episodes - episode_reward: -4.500 [-6.000, -3.000] - loss: 0.003 - mean_absolute_error: 0.357 - mean_q: 0.388 - mean_eps: 0.020 - ale.lives: 0.000

Interval 84 (830000 steps performed)
10000/10000 [=====] - 60s 6ms/step - reward: 2.0000e-04
4 episodes - episode_reward: 1.750 [-8.000, 10.000] - loss: 0.003 - mean_absolute_error: 0.346 - mean_q: 0.372 - mean_eps: 0.020 - ale.lives: 0.000

Interval 85 (840000 steps performed)
10000/10000 [=====] - 60s 6ms/step - reward: 0.0017
3 episodes - episode_reward: 4.333 [-4.000, 14.000] - loss: 0.003 - mean_absolute_error: 0.369 - mean_q: 0.416 - mean_eps: 0.020 - ale.lives: 0.000

Interval 86 (850000 steps performed)
10000/10000 [=====] - 60s 6ms/step - reward: 2.0000e-04
3 episodes - episode_reward: 0.333 [-11.000, 9.000] - loss: 0.003 - mean_absolute_error: 0.350 - mean_q: 0.390 - mean_eps: 0.020 - ale.lives: 0.000

Interval 87 (860000 steps performed)
10000/10000 [=====] - 60s 6ms/step - reward: -4.0000e-04
3 episodes - episode_reward: -1.667 [-8.000, 2.000] - loss: 0.003 - mean_absolute_error: 0.333 - mean_q: 0.357 - mean_eps: 0.020 - ale.lives: 0.000

Interval 88 (870000 steps performed)
10000/10000 [=====] - 60s 6ms/step - reward: 0.0000e+00
2 episodes - episode_reward: -0.500 [-9.000, 8.000] - loss: 0.003 - mean_absolute_error: 0.336 - mean_q: 0.358 - mean_eps: 0.020 - ale.lives: 0.000

Interval 89 (880000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: 2.0000e-04
3 episodes - episode_reward: 1.000 [-1.000, 2.000] - loss: 0.003 - mean_absolute_error: 0.331 - mean_q: 0.351 - mean_eps: 0.020 - ale.lives: 0.000

Interval 90 (890000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: 2.0000e-04
3 episodes - episode_reward: -2.000 [-9.000, 4.000] - loss: 0.004 - mean_absolute_error: 0.347 - mean_q: 0.348 - mean_eps: 0.020 - ale.lives: 0.000

Interval 91 (900000 steps performed)
10000/10000 [=====] - 60s 6ms/step - reward: -8.0000e-04
4 episodes - episode_reward: -1.250 [-19.000, 11.000] - loss: 0.004 - mean_absolute_error: 0.357 - mean_q: 0.361 - mean_eps: 0.020 - ale.lives: 0.000

Interval 92 (910000 steps performed)
10000/10000 [=====] - 60s 6ms/step - reward: 4.0000e-04
3 episodes - episode_reward: 1.000 [-9.000, 10.000] - loss: 0.003 - mean_absolute_error: 0.347 - mean_q: 0.362 - mean_eps: 0.020 - ale.lives: 0.000

Interval 93 (920000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: 0.0019
3 episodes - episode_reward: 7.000 [6.000, 8.000] - loss: 0.003 - mean_absolute_error: 0.357 - mean_q: 0.381 - mean_eps: 0.020 - ale.lives: 0.000

Interval 94 (930000 steps performed)
10000/10000 [=====] - 62s 6ms/step - reward: 0.0017
3 episodes - episode_reward: 5.000 [2.000, 7.000] - loss: 0.003 - mean_absolute_error: 0.376 - mean_q: 0.414 - mean_eps: 0.020 - ale.lives: 0.000

Interval 95 (940000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: 0.0029
4 episodes - episode_reward: 8.750 [4.000, 16.000] - loss: 0.003 - mean_absolute_error: 0.373 - mean_q: 0.430 - mean_eps: 0.020 - ale.lives: 0.000

Interval 96 (950000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: 0.0016
3 episodes - episode_reward: 4.667 [-3.000, 11.000] - loss: 0.003 - mean_absolute_error: 0.416 - mean_q: 0.490 - mean_eps: 0.020 - ale.lives: 0.000

Interval 97 (960000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: 0.0019
3 episodes - episode_reward: 5.667 [-7.000, 15.000] - loss: 0.003 - mean_absolute_error: 0.408 - mean_q: 0.478 - mean_eps: 0.020 - ale.lives: 0.000

Interval 98 (970000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: 3.0000e-04
3 episodes - episode_reward: 2.667 [-3.000, 6.000] - loss: 0.004 - mean_absolute_error: 0.388 - mean_q: 0.440 - mean_eps: 0.020 - ale.lives: 0.000

Interval 99 (980000 steps performed)
10000/10000 [=====] - 63s 6ms/step - reward: 2.0000e-04
3 episodes - episode_reward: -2.333 [-8.000, 3.000] - loss: 0.004 - mean_absolute_error: 0.369 - mean_q: 0.413 - mean_eps: 0.020 - ale.lives: 0.000

Interval 100 (990000 steps performed)
10000/10000 [=====] - 63s 6ms/step - reward: 0.0016
3 episodes - episode_reward: 8.333 [4.000, 11.000] - loss: 0.003 - mean_absolute_error: 0.393 - mean_q: 0.437 - mean_eps: 0.020 - ale.lives: 0.000

Interval 101 (1000000 steps performed)
10000/10000 [=====] - 64s 6ms/step - reward: 0.0018
3 episodes - episode_reward: 6.000 [-2.000, 11.000] - loss: 0.003 - mean_absolute_error: 0.375 - mean_q: 0.413 - mean_eps: 0.020 - ale.lives: 0.000

Interval 102 (1010000 steps performed)
10000/10000 [=====] - 64s 6ms/step - reward: 0.0033
3 episodes - episode_reward: 8.000 [5.000, 12.000] - loss: 0.003 - mean_absolute_error: 0.377 - mean_q: 0.430 - mean_eps: 0.020 - ale.lives: 0.000

Interval 103 (1020000 steps performed)
10000/10000 [=====] - 62s 6ms/step - reward: 6.0000e-04
3 episodes - episode_reward: 4.000 [-4.000, 10.000] - loss: 0.003 - mean_absolute_error: 0.403 - mean_q: 0.468 - mean_eps: 0.020 - ale.lives: 0.000

Interval 104 (1030000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: 0.0021
3 episodes - episode_reward: 6.667 [4.000, 11.000] - loss: 0.003 - mean_absolute_error: 0.400 - mean_q: 0.456 - mean_eps: 0.020 - ale.lives: 0.000

Interval 105 (1040000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: 5.0000e-04
4 episodes - episode_reward: 1.000 [-9.000, 12.000] - loss: 0.003 - mean_absolute_error: 0.359 - mean_q: 0.399 - mean_eps: 0.020 - ale.lives: 0.000

Interval 106 (1050000 steps performed)
10000/10000 [=====] - 60s 6ms/step - reward: -0.0018
3 episodes - episode_reward: -3.667 [-10.000, 5.000] - loss: 0.003 - mean_absolute_error: 0.349 - mean_q: 0.362 - mean_eps: 0.020 - ale.lives: 0.000

Interval 107 (1060000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: 0.0000e+00
2 episodes - episode_reward: -1.000 [-6.000, 4.000] - loss: 0.004 - mean_absolute_error: 0.309 - mean_q: 0.302 - mean_eps: 0.020 - ale.lives: 0.000

Interval 108 (1070000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: 0.0014
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3 episodes - episode_reward: 4.333 [-1.000, 13.000] - loss: 0.003 - mean_absolute_error: 0.342 - mean_q: 0.366 - mean_eps: 0.020 - ale.lives: 0.000

Interval 109 (1080000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: 0.0021
3 episodes - episode_reward: 5.000 [1.000, 11.000] - loss: 0.003 - mean_absolute_error: 0.349 - mean_q: 0.394 - mean_eps: 0.020 - ale.lives: 0.000

Interval 110 (1090000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: 0.0000e+00
2 episodes - episode_reward: 1.000 [-5.000, 7.000] - loss: 0.003 - mean_absolute_error: 0.326 - mean_q: 0.378 - mean_eps: 0.020 - ale.lives: 0.000

Interval 111 (1100000 steps performed)
10000/10000 [=====] - 60s 6ms/step - reward: 0.0012
3 episodes - episode_reward: 4.333 [1.000, 7.000] - loss: 0.003 - mean_absolute_error: 0.351 - mean_q: 0.395 - mean_eps: 0.020 - ale.lives: 0.000

Interval 112 (1110000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: 0.0012
3 episodes - episode_reward: 3.333 [-1.000, 8.000] - loss: 0.003 - mean_absolute_error: 0.349 - mean_q: 0.396 - mean_eps: 0.020 - ale.lives: 0.000

Interval 113 (1120000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: 5.0000e-04
3 episodes - episode_reward: 3.333 [-4.000, 13.000] - loss: 0.003 - mean_absolute_error: 0.364 - mean_q: 0.416 - mean_eps: 0.020 - ale.lives: 0.000

Interval 114 (1130000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: 0.0013
3 episodes - episode_reward: 2.333 [-1.000, 9.000] - loss: 0.003 - mean_absolute_error: 0.345 - mean_q: 0.385 - mean_eps: 0.020 - ale.lives: 0.000

Interval 115 (1140000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: 0.0021
3 episodes - episode_reward: 6.667 [6.000, 7.000] - loss: 0.003 - mean_absolute_error: 0.333 - mean_q: 0.369 - mean_eps: 0.020 - ale.lives: 0.000

Interval 116 (1150000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: 0.0038
3 episodes - episode_reward: 12.333 [8.000, 16.000] - loss: 0.002 - mean_absolute_error: 0.393 - mean_q: 0.459 - mean_eps: 0.020 - ale.lives: 0.000

Interval 117 (1160000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: 0.0036
4 episodes - episode_reward: 10.250 [3.000, 19.000] - loss: 0.003 - mean_absolute_error: 0.404 - mean_q: 0.473 - mean_eps: 0.020 - ale.lives: 0.000

Interval 118 (1170000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: 0.0022
3 episodes - episode_reward: 7.333 [5.000, 9.000] - loss: 0.003 - mean_absolute_error: 0.416 - mean_q: 0.493 - mean_eps: 0.020 - ale.lives: 0.000

Interval 119 (1180000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: 0.0016
2 episodes - episode_reward: 6.000 [-1.000, 13.000] - loss: 0.003 - mean_absolute_error: 0.382 - mean_q: 0.464 - mean_eps: 0.020 - ale.lives: 0.000

Interval 120 (1190000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: 0.0024
3 episodes - episode_reward: 6.000 [1.000, 14.000] - loss: 0.003 - mean_absolute_error: 0.395 - mean_q: 0.474 - mean_eps: 0.020 - ale.lives: 0.000

Interval 121 (1200000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: 0.0016
4 episodes - episode_reward: 7.000 [2.000, 12.000] - loss: 0.003 - mean_absolute_error: 0.431 - mean_q: 0.515 - mean_eps: 0.020 - ale.lives: 0.000

Interval 122 (1210000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: -1.0000e-03
2 episodes - episode_reward: 1.000 [-1.000, 3.000] - loss: 0.004 - mean_absolute_error: 0.416 - mean_q: 0.483 - mean_eps: 0.020 - ale.lives: 0.000

Interval 123 (1220000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: 0.0018
3 episodes - episode_reward: 3.667 [-3.000, 7.000] - loss: 0.003 - mean_absolute_error: 0.380 - mean_q: 0.452 - mean_eps: 0.020 - ale.lives: 0.000

Interval 124 (1230000 steps performed)
10000/10000 [=====] - 62s 6ms/step - reward: 0.0023
3 episodes - episode_reward: 5.000 [1.000, 7.000] - loss: 0.003 - mean_absolute_error: 0.414 - mean_q: 0.501 - mean_eps: 0.020 - ale.lives: 0.000

Interval 125 (1240000 steps performed)
10000/10000 [=====] - 64s 6ms/step - reward: 6.0000e-04
3 episodes - episode_reward: 4.667 [3.000, 6.000] - loss: 0.003 - mean_absolute_error: 0.411 - mean_q: 0.483 - mean_eps: 0.020 - ale.lives: 0.000

Interval 126 (1250000 steps performed)
10000/10000 [=====] - 64s 6ms/step - reward: 0.0019
3 episodes - episode_reward: 2.000 [-9.000, 12.000] - loss: 0.003 - mean_absolute_error: 0.374 - mean_q: 0.434 - mean_eps: 0.020 - ale.lives: 0.000

Interval 127 (1260000 steps performed)
10000/10000 [=====] - 62s 6ms/step - reward: 5.0000e-04
3 episodes - episode_reward: 7.333 [1.000, 13.000] - loss: 0.003 - mean_absolute_error: 0.353 - mean_q: 0.415 - mean_eps: 0.020 - ale.lives: 0.000

Interval 128 (1270000 steps performed)
10000/10000 [=====] - 62s 6ms/step - reward: 5.0000e-04
3 episodes - episode_reward: -1.333 [-12.000, 11.000] - loss: 0.003 - mean_absolute_error: 0.360 - mean_q: 0.422 - mean_eps: 0.020 - ale.lives: 0.000

Interval 129 (1280000 steps performed)
10000/10000 [=====] - 63s 6ms/step - reward: 0.0023
3 episodes - episode_reward: 8.000 [1.000, 13.000] - loss: 0.003 - mean_absolute_error: 0.385 - mean_q: 0.459 - mean_eps: 0.020 - ale.lives: 0.000

Interval 130 (1290000 steps performed)
10000/10000 [=====] - 64s 6ms/step - reward: 0.0021
3 episodes - episode_reward: 7.000 [3.000, 13.000] - loss: 0.003 - mean_absolute_error: 0.410 - mean_q: 0.504 - mean_eps: 0.020 - ale.lives: 0.000

Interval 131 (1300000 steps performed)
10000/10000 [=====] - 64s 6ms/step - reward: 0.0020
3 episodes - episode_reward: 3.667 [-1.000, 11.000] - loss: 0.003 - mean_absolute_error: 0.431 - mean_q: 0.516 - mean_eps: 0.020 - ale.lives: 0.000

Interval 132 (1310000 steps performed)
10000/10000 [=====] - 64s 6ms/step - reward: 0.0012
3 episodes - episode_reward: 6.333 [5.000, 9.000] - loss: 0.003 - mean_absolute_error: 0.419 - mean_q: 0.493 - mean_eps: 0.020 - ale.lives: 0.000

Interval 133 (1320000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: 0.0032
4 episodes - episode_reward: 8.250 [1.000, 13.000] - loss: 0.003 - mean_absolute_error: 0.392 - mean_q: 0.477 - mean_eps: 0.020 - ale.lives: 0.000

Interval 134 (1330000 steps performed)
10000/10000 [=====] - 62s 6ms/step - reward: 0.0027
3 episodes - episode_reward: 7.667 [3.000, 14.000] - loss: 0.003 - mean_absolute_error: 0.448 - mean_q: 0.555 - mean_eps: 0.020 - ale.lives: 0.000

Interval 135 (1340000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: 9.0000e-04
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2 episodes - episode_reward: 8.000 [2.000, 14.000] - loss: 0.002 - mean_absolute_error: 0.432 - mean_q: 0.531 - mean_eps: 0.020 - ale.lives: 0.000

Interval 136 (1350000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: 0.0028
4 episodes - episode_reward: 7.000 [-4.000, 16.000] - loss: 0.003 - mean_absolute_error: 0.429 - mean_q: 0.524 - mean_eps: 0.020 - ale.lives: 0.000

Interval 137 (1360000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: 1.0000e-03
2 episodes - episode_reward: 4.000 [1.000, 7.000] - loss: 0.003 - mean_absolute_error: 0.436 - mean_q: 0.534 - mean_eps: 0.020 - ale.lives: 0.000

Interval 138 (1370000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: 0.0031
4 episodes - episode_reward: 7.750 [-3.000, 15.000] - loss: 0.002 - mean_absolute_error: 0.416 - mean_q: 0.512 - mean_eps: 0.020 - ale.lives: 0.000

Interval 139 (1380000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: 0.0023
2 episodes - episode_reward: 7.000 [4.000, 10.000] - loss: 0.003 - mean_absolute_error: 0.447 - mean_q: 0.561 - mean_eps: 0.020 - ale.lives: 0.000

Interval 140 (1390000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: 6.0000e-04
3 episodes - episode_reward: 1.000 [-5.000, 9.000] - loss: 0.003 - mean_absolute_error: 0.405 - mean_q: 0.488 - mean_eps: 0.020 - ale.lives: 0.000

Interval 141 (1400000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: 0.0028
3 episodes - episode_reward: 11.333 [6.000, 14.000] - loss: 0.003 - mean_absolute_error: 0.425 - mean_q: 0.526 - mean_eps: 0.020 - ale.lives: 0.000

Interval 142 (1410000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: 0.0030
3 episodes - episode_reward: 8.667 [1.000, 13.000] - loss: 0.002 - mean_absolute_error: 0.437 - mean_q: 0.549 - mean_eps: 0.020 - ale.lives: 0.000

Interval 143 (1420000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: 0.0014
3 episodes - episode_reward: 6.667 [-1.000, 12.000] - loss: 0.002 - mean_absolute_error: 0.412 - mean_q: 0.514 - mean_eps: 0.020 - ale.lives: 0.000

Interval 144 (1430000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: 9.0000e-04
2 episodes - episode_reward: 3.000 [2.000, 4.000] - loss: 0.003 - mean_absolute_error: 0.393 - mean_q: 0.485 - mean_eps: 0.020 - ale.lives: 0.000

Interval 145 (1440000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: 0.0012
3 episodes - episode_reward: 5.667 [-7.000, 17.000] - loss: 0.002 - mean_absolute_error: 0.387 - mean_q: 0.481 - mean_eps: 0.020 - ale.lives: 0.000

Interval 146 (1450000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: 0.0018
3 episodes - episode_reward: 4.333 [-1.000, 11.000] - loss: 0.003 - mean_absolute_error: 0.363 - mean_q: 0.442 - mean_eps: 0.020 - ale.lives: 0.000

Interval 147 (1460000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: 0.0027
3 episodes - episode_reward: 9.000 [7.000, 11.000] - loss: 0.003 - mean_absolute_error: 0.414 - mean_q: 0.509 - mean_eps: 0.020 - ale.lives: 0.000

Interval 148 (1470000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: 0.0025
3 episodes - episode_reward: 9.667 [6.000, 14.000] - loss: 0.003 - mean_absolute_error: 0.413 - mean_q: 0.508 - mean_eps: 0.020 - ale.lives: 0.000

Interval 149 (1480000 steps performed)
10000/10000 [=====] - 62s 6ms/step - reward: 6.0000e-04
3 episodes - episode_reward: 3.333 [-1.000, 8.000] - loss: 0.003 - mean_absolute_error: 0.373 - mean_q: 0.456 - mean_eps: 0.020 - ale.lives: 0.000

Interval 150 (1490000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: 0.0028
3 episodes - episode_reward: 3.333 [-4.000, 13.000] - loss: 0.003 - mean_absolute_error: 0.411 - mean_q: 0.493 - mean_eps: 0.020 - ale.lives: 0.000

Interval 151 (1500000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: 6.0000e-04
3 episodes - episode_reward: 5.667 [-13.000, 18.000] - loss: 0.003 - mean_absolute_error: 0.401 - mean_q: 0.481 - mean_eps: 0.020 - ale.lives: 0.000

Interval 152 (1510000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: 6.0000e-04
3 episodes - episode_reward: 3.333 [-11.000, 15.000] - loss: 0.002 - mean_absolute_error: 0.377 - mean_q: 0.458 - mean_eps: 0.020 - ale.lives: 0.000

Interval 153 (1520000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: 3.0000e-04
3 episodes - episode_reward: 3.667 [1.000, 8.000] - loss: 0.003 - mean_absolute_error: 0.341 - mean_q: 0.406 - mean_eps: 0.020 - ale.lives: 0.000

Interval 154 (1530000 steps performed)
10000/10000 [=====] - 62s 6ms/step - reward: 6.0000e-04
3 episodes - episode_reward: -4.333 [-8.000, 1.000] - loss: 0.003 - mean_absolute_error: 0.340 - mean_q: 0.389 - mean_eps: 0.020 - ale.lives: 0.000

Interval 155 (1540000 steps performed)
10000/10000 [=====] - 62s 6ms/step - reward: 0.0030
4 episodes - episode_reward: 10.000 [6.000, 15.000] - loss: 0.002 - mean_absolute_error: 0.384 - mean_q: 0.451 - mean_eps: 0.020 - ale.lives: 0.000

Interval 156 (1550000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: 0.0021
2 episodes - episode_reward: 7.500 [3.000, 12.000] - loss: 0.003 - mean_absolute_error: 0.360 - mean_q: 0.433 - mean_eps: 0.020 - ale.lives: 0.000

Interval 157 (1560000 steps performed)
10000/10000 [=====] - 64s 6ms/step - reward: 0.0038
4 episodes - episode_reward: 11.000 [7.000, 16.000] - loss: 0.002 - mean_absolute_error: 0.369 - mean_q: 0.442 - mean_eps: 0.020 - ale.lives: 0.000

Interval 158 (1570000 steps performed)
10000/10000 [=====] - 66s 7ms/step - reward: 0.0028
3 episodes - episode_reward: 10.667 [4.000, 16.000] - loss: 0.002 - mean_absolute_error: 0.426 - mean_q: 0.513 - mean_eps: 0.020 - ale.lives: 0.000

Interval 159 (1580000 steps performed)
10000/10000 [=====] - 66s 7ms/step - reward: 0.0026
4 episodes - episode_reward: 5.750 [-6.000, 12.000] - loss: 0.003 - mean_absolute_error: 0.441 - mean_q: 0.516 - mean_eps: 0.020 - ale.lives: 0.000

Interval 160 (1590000 steps performed)
10000/10000 [=====] - 64s 6ms/step - reward: 4.0000e-04
2 episodes - episode_reward: 4.000 [-1.000, 9.000] - loss: 0.003 - mean_absolute_error: 0.419 - mean_q: 0.486 - mean_eps: 0.020 - ale.lives: 0.000

Interval 161 (1600000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: 0.0023
3 episodes - episode_reward: 5.000 [3.000, 9.000] - loss: 0.003 - mean_absolute_error: 0.366 - mean_q: 0.420 - mean_eps: 0.020 - ale.lives: 0.000

Interval 162 (1610000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: 0.0035
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3 episodes - episode_reward: 8.667 [8.000, 9.000] - loss: 0.003 - mean_absolute_error: 0.405 - mean_q: 0.470 - mean_eps: 0.020 - ale.lives: 0.000

Interval 163 (1620000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: 0.0014
3 episodes - episode_reward: 4.667 [-4.000, 15.000] - loss: 0.003 - mean_absolute_error: 0.433 - mean_q: 0.523 - mean_eps: 0.020 - ale.lives: 0.000

Interval 164 (1630000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: 0.0034
4 episodes - episode_reward: 13.250 [7.000, 18.000] - loss: 0.003 - mean_absolute_error: 0.428 - mean_q: 0.528 - mean_eps: 0.020 - ale.lives: 0.000

Interval 165 (1640000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: 0.0012
2 episodes - episode_reward: 2.000 [-1.000, 5.000] - loss: 0.003 - mean_absolute_error: 0.426 - mean_q: 0.524 - mean_eps: 0.020 - ale.lives: 0.000

Interval 166 (1650000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: 0.0030
3 episodes - episode_reward: 7.667 [1.000, 12.000] - loss: 0.003 - mean_absolute_error: 0.396 - mean_q: 0.489 - mean_eps: 0.020 - ale.lives: 0.000

Interval 167 (1660000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: 0.0015
3 episodes - episode_reward: 3.667 [-1.000, 13.000] - loss: 0.002 - mean_absolute_error: 0.466 - mean_q: 0.569 - mean_eps: 0.020 - ale.lives: 0.000

Interval 168 (1670000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: 3.0000e-04
3 episodes - episode_reward: 5.000 [1.000, 8.000] - loss: 0.003 - mean_absolute_error: 0.414 - mean_q: 0.482 - mean_eps: 0.020 - ale.lives: 0.000

Interval 169 (1680000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: 0.0018
3 episodes - episode_reward: 7.000 [2.000, 17.000] - loss: 0.002 - mean_absolute_error: 0.444 - mean_q: 0.545 - mean_eps: 0.020 - ale.lives: 0.000

Interval 170 (1690000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: 0.0000e+00
3 episodes - episode_reward: -0.333 [-6.000, 9.000] - loss: 0.003 - mean_absolute_error: 0.437 - mean_q: 0.525 - mean_eps: 0.020 - ale.lives: 0.000

Interval 171 (1700000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: 0.0017
2 episodes - episode_reward: 4.000 [3.000, 5.000] - loss: 0.003 - mean_absolute_error: 0.438 - mean_q: 0.536 - mean_eps: 0.020 - ale.lives: 0.000

Interval 172 (1710000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: 0.0028
3 episodes - episode_reward: 6.333 [-3.000, 17.000] - loss: 0.003 - mean_absolute_error: 0.415 - mean_q: 0.510 - mean_eps: 0.020 - ale.lives: 0.000

Interval 173 (1720000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: 0.0037
3 episodes - episode_reward: 14.667 [10.000, 17.000] - loss: 0.002 - mean_absolute_error: 0.445 - mean_q: 0.558 - mean_eps: 0.020 - ale.lives: 0.000

Interval 174 (1730000 steps performed)
10000/10000 [=====] - 62s 6ms/step - reward: 0.0029
3 episodes - episode_reward: 13.333 [8.000, 21.000] - loss: 0.002 - mean_absolute_error: 0.432 - mean_q: 0.551 - mean_eps: 0.020 - ale.lives: 0.000

Interval 175 (1740000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: 0.0025
3 episodes - episode_reward: 7.000 [5.000, 10.000] - loss: 0.002 - mean_absolute_error: 0.453 - mean_q: 0.567 - mean_eps: 0.020 - ale.lives: 0.000

Interval 176 (1750000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: 0.0049
3 episodes - episode_reward: 13.333 [10.000, 16.000] - loss: 0.002 - mean_absolute_error: 0.468 - mean_q: 0.590 - mean_eps: 0.020 - ale.lives: 0.000

Interval 177 (1760000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: 0.0043
4 episodes - episode_reward: 13.500 [10.000, 19.000] - loss: 0.002 - mean_absolute_error: 0.497 - mean_q: 0.630 - mean_eps: 0.020 - ale.lives: 0.000

Interval 178 (1770000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: 0.0026
3 episodes - episode_reward: 9.333 [6.000, 13.000] - loss: 0.002 - mean_absolute_error: 0.432 - mean_q: 0.539 - mean_eps: 0.020 - ale.lives: 0.000

Interval 179 (1780000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: 3.0000e-04
2 episodes - episode_reward: -1.000 [-1.000, -1.000] - loss: 0.002 - mean_absolute_error: 0.455 - mean_q: 0.562 - mean_eps: 0.020 - ale.lives: 0.000

Interval 180 (1790000 steps performed)
10000/10000 [=====] - 62s 6ms/step - reward: 0.0027
3 episodes - episode_reward: 9.000 [9.000, 9.000] - loss: 0.002 - mean_absolute_error: 0.480 - mean_q: 0.583 - mean_eps: 0.020 - ale.lives: 0.000

Interval 181 (1800000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: 5.0000e-04
3 episodes - episode_reward: 6.000 [5.000, 8.000] - loss: 0.002 - mean_absolute_error: 0.438 - mean_q: 0.534 - mean_eps: 0.020 - ale.lives: 0.000

Interval 182 (1810000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: 0.0011
3 episodes - episode_reward: 1.667 [-3.000, 6.000] - loss: 0.002 - mean_absolute_error: 0.384 - mean_q: 0.471 - mean_eps: 0.020 - ale.lives: 0.000

Interval 183 (1820000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: 0.0021
2 episodes - episode_reward: 9.000 [8.000, 10.000] - loss: 0.002 - mean_absolute_error: 0.403 - mean_q: 0.500 - mean_eps: 0.020 - ale.lives: 0.000

Interval 184 (1830000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: 4.0000e-04
3 episodes - episode_reward: 2.333 [-1.000, 5.000] - loss: 0.002 - mean_absolute_error: 0.409 - mean_q: 0.499 - mean_eps: 0.020 - ale.lives: 0.000

Interval 185 (1840000 steps performed)
10000/10000 [=====] - 62s 6ms/step - reward: 0.0018
2 episodes - episode_reward: 4.000 [2.000, 6.000] - loss: 0.002 - mean_absolute_error: 0.390 - mean_q: 0.478 - mean_eps: 0.020 - ale.lives: 0.000

Interval 186 (1850000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: 0.0026
4 episodes - episode_reward: 9.000 [3.000, 14.000] - loss: 0.002 - mean_absolute_error: 0.442 - mean_q: 0.550 - mean_eps: 0.020 - ale.lives: 0.000

Interval 187 (1860000 steps performed)
10000/10000 [=====] - 63s 6ms/step - reward: 0.0013
2 episodes - episode_reward: 4.500 [-2.000, 11.000] - loss: 0.002 - mean_absolute_error: 0.433 - mean_q: 0.526 - mean_eps: 0.020 - ale.lives: 0.000

Interval 188 (1870000 steps performed)
10000/10000 [=====] - 65s 7ms/step - reward: 0.0015
3 episodes - episode_reward: 6.667 [-5.000, 14.000] - loss: 0.002 - mean_absolute_error: 0.412 - mean_q: 0.504 - mean_eps: 0.020 - ale.lives: 0.000

Interval 189 (1880000 steps performed)
10000/10000 [=====] - 65s 7ms/step - reward: 7.0000e-04
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3 episodes - episode_reward: 2.333 [-3.000, 6.000] - loss: 0.002 - mean_absolute_error: 0.402 - mean_q: 0.481 - mean_eps: 0.020 - ale.lives: 0.000

Interval 190 (1890000 steps performed)
10000/10000 [=====] - 65s 7ms/step - reward: 0.0020
2 episodes - episode_reward: 9.000 [3.000, 15.000] - loss: 0.003 - mean_absolute_error: 0.402 - mean_q: 0.489 - mean_eps: 0.020 - ale.lives: 0.000

Interval 191 (1900000 steps performed)
10000/10000 [=====] - 62s 6ms/step - reward: 5.0000e-04
2 episodes - episode_reward: -2.000 [-2.000, -2.000] - loss: 0.002 - mean_absolute_error: 0.369 - mean_q: 0.451 - mean_eps: 0.020 - ale.lives: 0.000

Interval 192 (1910000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: 0.0025
3 episodes - episode_reward: 9.333 [8.000, 11.000] - loss: 0.002 - mean_absolute_error: 0.362 - mean_q: 0.450 - mean_eps: 0.020 - ale.lives: 0.000

Interval 193 (1920000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: 6.0000e-04
2 episodes - episode_reward: 3.500 [2.000, 5.000] - loss: 0.003 - mean_absolute_error: 0.396 - mean_q: 0.495 - mean_eps: 0.020 - ale.lives: 0.000

Interval 194 (1930000 steps performed)
10000/10000 [=====] - 62s 6ms/step - reward: 8.0000e-04
3 episodes - episode_reward: 3.667 [-14.000, 15.000] - loss: 0.002 - mean_absolute_error: 0.381 - mean_q: 0.475 - mean_eps: 0.020 - ale.lives: 0.000

Interval 195 (1940000 steps performed)
10000/10000 [=====] - 62s 6ms/step - reward: 0.0028
3 episodes - episode_reward: 7.667 [4.000, 12.000] - loss: 0.002 - mean_absolute_error: 0.382 - mean_q: 0.463 - mean_eps: 0.020 - ale.lives: 0.000

Interval 196 (1950000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: 0.0048
4 episodes - episode_reward: 12.250 [8.000, 15.000] - loss: 0.002 - mean_absolute_error: 0.428 - mean_q: 0.531 - mean_eps: 0.020 - ale.lives: 0.000

Interval 197 (1960000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: 0.0024
3 episodes - episode_reward: 9.000 [6.000, 13.000] - loss: 0.002 - mean_absolute_error: 0.453 - mean_q: 0.567 - mean_eps: 0.020 - ale.lives: 0.000

Interval 198 (1970000 steps performed)
10000/10000 [=====] - 62s 6ms/step - reward: 0.0021
3 episodes - episode_reward: 7.667 [4.000, 12.000] - loss: 0.002 - mean_absolute_error: 0.424 - mean_q: 0.528 - mean_eps: 0.020 - ale.lives: 0.000

Interval 199 (1980000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: 0.0037
3 episodes - episode_reward: 12.667 [12.000, 13.000] - loss: 0.002 - mean_absolute_error: 0.436 - mean_q: 0.551 - mean_eps: 0.020 - ale.lives: 0.000

Interval 200 (1990000 steps performed)
10000/10000 [=====] - 62s 6ms/step - reward: 0.0032
3 episodes - episode_reward: 10.000 [2.000, 15.000] - loss: 0.002 - mean_absolute_error: 0.428 - mean_q: 0.538 - mean_eps: 0.020 - ale.lives: 0.000

Interval 201 (2000000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: 0.0031
3 episodes - episode_reward: 10.000 [4.000, 14.000] - loss: 0.002 - mean_absolute_error: 0.500 - mean_q: 0.628 - mean_eps: 0.020 - ale.lives: 0.000

Interval 202 (2010000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: 0.0037
3 episodes - episode_reward: 12.000 [7.000, 15.000] - loss: 0.002 - mean_absolute_error: 0.478 - mean_q: 0.607 - mean_eps: 0.020 - ale.lives: 0.000

Interval 203 (2020000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: 0.0019
2 episodes - episode_reward: 5.000 [4.000, 6.000] - loss: 0.002 - mean_absolute_error: 0.456 - mean_q: 0.578 - mean_eps: 0.020 - ale.lives: 0.000

Interval 204 (2030000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: 0.0024
3 episodes - episode_reward: 9.667 [8.000, 11.000] - loss: 0.002 - mean_absolute_error: 0.461 - mean_q: 0.579 - mean_eps: 0.020 - ale.lives: 0.000

Interval 205 (2040000 steps performed)
10000/10000 [=====] - 62s 6ms/step - reward: 0.0014
3 episodes - episode_reward: 7.000 [-2.000, 15.000] - loss: 0.002 - mean_absolute_error: 0.451 - mean_q: 0.562 - mean_eps: 0.020 - ale.lives: 0.000

Interval 206 (2050000 steps performed)
10000/10000 [=====] - 62s 6ms/step - reward: 0.0028
3 episodes - episode_reward: 9.667 [-1.000, 16.000] - loss: 0.002 - mean_absolute_error: 0.472 - mean_q: 0.592 - mean_eps: 0.020 - ale.lives: 0.000

Interval 207 (2060000 steps performed)
10000/10000 [=====] - 62s 6ms/step - reward: 0.0037
3 episodes - episode_reward: 10.000 [1.000, 16.000] - loss: 0.002 - mean_absolute_error: 0.509 - mean_q: 0.641 - mean_eps: 0.020 - ale.lives: 0.000

Interval 208 (2070000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: 0.0033
3 episodes - episode_reward: 8.667 [7.000, 11.000] - loss: 0.002 - mean_absolute_error: 0.505 - mean_q: 0.635 - mean_eps: 0.020 - ale.lives: 0.000

Interval 209 (2080000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: 0.0025
3 episodes - episode_reward: 11.667 [6.000, 15.000] - loss: 0.002 - mean_absolute_error: 0.499 - mean_q: 0.627 - mean_eps: 0.020 - ale.lives: 0.000

Interval 210 (2090000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: 0.0040
4 episodes - episode_reward: 10.750 [5.000, 17.000] - loss: 0.002 - mean_absolute_error: 0.484 - mean_q: 0.609 - mean_eps: 0.020 - ale.lives: 0.000

Interval 211 (2100000 steps performed)
10000/10000 [=====] - 62s 6ms/step - reward: 0.0042
3 episodes - episode_reward: 11.667 [4.000, 18.000] - loss: 0.002 - mean_absolute_error: 0.526 - mean_q: 0.666 - mean_eps: 0.020 - ale.lives: 0.000

Interval 212 (2110000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: 0.0018
3 episodes - episode_reward: 4.667 [-2.000, 10.000] - loss: 0.003 - mean_absolute_error: 0.479 - mean_q: 0.599 - mean_eps: 0.020 - ale.lives: 0.000

Interval 213 (2120000 steps performed)
10000/10000 [=====] - 62s 6ms/step - reward: 0.0053
4 episodes - episode_reward: 15.750 [9.000, 20.000] - loss: 0.002 - mean_absolute_error: 0.537 - mean_q: 0.677 - mean_eps: 0.020 - ale.lives: 0.000

Interval 214 (2130000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: 0.0034
3 episodes - episode_reward: 9.667 [-1.000, 15.000] - loss: 0.002 - mean_absolute_error: 0.525 - mean_q: 0.659 - mean_eps: 0.020 - ale.lives: 0.000

Interval 215 (2140000 steps performed)
10000/10000 [=====] - 64s 6ms/step - reward: 0.0028
3 episodes - episode_reward: 10.333 [9.000, 11.000] - loss: 0.003 - mean_absolute_error: 0.510 - mean_q: 0.637 - mean_eps: 0.020 - ale.lives: 0.000

Interval 216 (2150000 steps performed)
10000/10000 [=====] - 63s 6ms/step - reward: 6.0000e-04
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2 episodes - episode_reward: 4.000 [-1.000, 9.000] - loss: 0.003 - mean_absolute_error: 0.475 - mean_q: 0.594 - mean_eps: 0.020 - ale.lives: 0.000

Interval 217 (2160000 steps performed)
10000/10000 [=====] - 64s 6ms/step - reward: 0.0026
3 episodes - episode_reward: 4.667 [1.000, 11.000] - loss: 0.002 - mean_absolute_error: 0.483 - mean_q: 0.600 - mean_eps: 0.020 - ale.lives: 0.000

Interval 218 (2170000 steps performed)
10000/10000 [=====] - 62s 6ms/step - reward: 0.0019
3 episodes - episode_reward: 7.667 [-1.000, 12.000] - loss: 0.002 - mean_absolute_error: 0.466 - mean_q: 0.578 - mean_eps: 0.020 - ale.lives: 0.000

Interval 219 (2180000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: 0.0022
3 episodes - episode_reward: 10.667 [8.000, 14.000] - loss: 0.002 - mean_absolute_error: 0.470 - mean_q: 0.587 - mean_eps: 0.020 - ale.lives: 0.000

Interval 220 (2190000 steps performed)
10000/10000 [=====] - 60s 6ms/step - reward: 0.0021
3 episodes - episode_reward: 4.667 [-5.000, 10.000] - loss: 0.003 - mean_absolute_error: 0.443 - mean_q: 0.554 - mean_eps: 0.020 - ale.lives: 0.000

Interval 221 (2200000 steps performed)
10000/10000 [=====] - 60s 6ms/step - reward: 0.0024
3 episodes - episode_reward: 9.667 [7.000, 14.000] - loss: 0.003 - mean_absolute_error: 0.465 - mean_q: 0.585 - mean_eps: 0.020 - ale.lives: 0.000

Interval 222 (2210000 steps performed)
10000/10000 [=====] - 59s 6ms/step - reward: 0.0024
3 episodes - episode_reward: 8.333 [7.000, 10.000] - loss: 0.003 - mean_absolute_error: 0.458 - mean_q: 0.573 - mean_eps: 0.020 - ale.lives: 0.000

Interval 223 (2220000 steps performed)
10000/10000 [=====] - 59s 6ms/step - reward: 0.0040
3 episodes - episode_reward: 12.333 [11.000, 14.000] - loss: 0.003 - mean_absolute_error: 0.496 - mean_q: 0.632 - mean_eps: 0.020 - ale.lives: 0.000

Interval 224 (2230000 steps performed)
10000/10000 [=====] - 59s 6ms/step - reward: 0.0025
3 episodes - episode_reward: 8.000 [5.000, 14.000] - loss: 0.003 - mean_absolute_error: 0.515 - mean_q: 0.649 - mean_eps: 0.020 - ale.lives: 0.000

Interval 225 (2240000 steps performed)
10000/10000 [=====] - 59s 6ms/step - reward: 0.0032
3 episodes - episode_reward: 12.000 [8.000, 14.000] - loss: 0.002 - mean_absolute_error: 0.510 - mean_q: 0.644 - mean_eps: 0.020 - ale.lives: 0.000

Interval 226 (2250000 steps performed)
10000/10000 [=====] - 58s 6ms/step - reward: 0.0033
3 episodes - episode_reward: 8.333 [-1.000, 16.000] - loss: 0.002 - mean_absolute_error: 0.497 - mean_q: 0.623 - mean_eps: 0.020 - ale.lives: 0.000

Interval 227 (2260000 steps performed)
10000/10000 [=====] - 59s 6ms/step - reward: 0.0046
4 episodes - episode_reward: 12.500 [6.000, 18.000] - loss: 0.002 - mean_absolute_error: 0.508 - mean_q: 0.644 - mean_eps: 0.020 - ale.lives: 0.000

Interval 228 (2270000 steps performed)
10000/10000 [=====] - 58s 6ms/step - reward: 0.0024
3 episodes - episode_reward: 9.333 [4.000, 19.000] - loss: 0.002 - mean_absolute_error: 0.510 - mean_q: 0.640 - mean_eps: 0.020 - ale.lives: 0.000

Interval 229 (2280000 steps performed)
10000/10000 [=====] - 59s 6ms/step - reward: 0.0029
3 episodes - episode_reward: 8.333 [2.000, 13.000] - loss: 0.003 - mean_absolute_error: 0.473 - mean_q: 0.589 - mean_eps: 0.020 - ale.lives: 0.000

Interval 230 (2290000 steps performed)
10000/10000 [=====] - 59s 6ms/step - reward: 0.0036
3 episodes - episode_reward: 13.000 [10.000, 17.000] - loss: 0.002 - mean_absolute_error: 0.496 - mean_q: 0.629 - mean_eps: 0.020 - ale.lives: 0.000

Interval 231 (2300000 steps performed)
10000/10000 [=====] - 58s 6ms/step - reward: 0.0024
3 episodes - episode_reward: 7.667 [6.000, 10.000] - loss: 0.002 - mean_absolute_error: 0.494 - mean_q: 0.619 - mean_eps: 0.020 - ale.lives: 0.000

Interval 232 (2310000 steps performed)
10000/10000 [=====] - 58s 6ms/step - reward: 0.0047
3 episodes - episode_reward: 15.000 [7.000, 20.000] - loss: 0.002 - mean_absolute_error: 0.475 - mean_q: 0.597 - mean_eps: 0.020 - ale.lives: 0.000

Interval 233 (2320000 steps performed)
10000/10000 [=====] - 58s 6ms/step - reward: 0.0049
3 episodes - episode_reward: 14.333 [10.000, 17.000] - loss: 0.002 - mean_absolute_error: 0.536 - mean_q: 0.684 - mean_eps: 0.020 - ale.lives: 0.000

Interval 234 (2330000 steps performed)
10000/10000 [=====] - 58s 6ms/step - reward: 0.0034
4 episodes - episode_reward: 11.500 [5.000, 16.000] - loss: 0.002 - mean_absolute_error: 0.522 - mean_q: 0.662 - mean_eps: 0.020 - ale.lives: 0.000

Interval 235 (2340000 steps performed)
10000/10000 [=====] - 59s 6ms/step - reward: 0.0029
2 episodes - episode_reward: 10.000 [10.000, 10.000] - loss: 0.002 - mean_absolute_error: 0.488 - mean_q: 0.611 - mean_eps: 0.020 - ale.lives: 0.000

Interval 236 (2350000 steps performed)
10000/10000 [=====] - 58s 6ms/step - reward: 0.0025
3 episodes - episode_reward: 10.667 [10.000, 11.000] - loss: 0.002 - mean_absolute_error: 0.490 - mean_q: 0.617 - mean_eps: 0.020 - ale.lives: 0.000

Interval 237 (2360000 steps performed)
10000/10000 [=====] - 58s 6ms/step - reward: 0.0013
3 episodes - episode_reward: 4.333 [2.000, 7.000] - loss: 0.002 - mean_absolute_error: 0.443 - mean_q: 0.556 - mean_eps: 0.020 - ale.lives: 0.000

Interval 238 (2370000 steps performed)
10000/10000 [=====] - 58s 6ms/step - reward: 4.0000e-04
2 episodes - episode_reward: -3.500 [-4.000, -3.000] - loss: 0.003 - mean_absolute_error: 0.422 - mean_q: 0.521 - mean_eps: 0.020 - ale.lives: 0.000

Interval 239 (2380000 steps performed)
10000/10000 [=====] - 58s 6ms/step - reward: 0.0013
3 episodes - episode_reward: 9.000 [5.000, 15.000] - loss: 0.002 - mean_absolute_error: 0.438 - mean_q: 0.539 - mean_eps: 0.020 - ale.lives: 0.000

Interval 240 (2390000 steps performed)
10000/10000 [=====] - 58s 6ms/step - reward: 0.0033
3 episodes - episode_reward: 8.000 [3.000, 11.000] - loss: 0.002 - mean_absolute_error: 0.453 - mean_q: 0.572 - mean_eps: 0.020 - ale.lives: 0.000

Interval 241 (2400000 steps performed)
10000/10000 [=====] - 59s 6ms/step - reward: 0.0033
3 episodes - episode_reward: 13.000 [10.000, 16.000] - loss: 0.002 - mean_absolute_error: 0.484 - mean_q: 0.611 - mean_eps: 0.020 - ale.lives: 0.000

Interval 242 (2410000 steps performed)
10000/10000 [=====] - 58s 6ms/step - reward: 0.0030
3 episodes - episode_reward: 9.667 [5.000, 16.000] - loss: 0.002 - mean_absolute_error: 0.448 - mean_q: 0.566 - mean_eps: 0.020 - ale.lives: 0.000

Interval 243 (2420000 steps performed)
10000/10000 [=====] - 58s 6ms/step - reward: 0.0020
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3 episodes - episode_reward: 7.333 [2.000, 13.000] - loss: 0.002 - mean_absolute_error: 0.477 - mean_q: 0.600 - mean_eps: 0.020 - ale.lives: 0.000

Interval 244 (2430000 steps performed)
10000/10000 [=====] - 58s 6ms/step - reward: 0.0055
3 episodes - episode_reward: 14.667 [10.000, 20.000] - loss: 0.002 - mean_absolute_error: 0.502 - mean_q: 0.632 - mean_eps: 0.020 - ale.lives: 0.000

Interval 245 (2440000 steps performed)
10000/10000 [=====] - 59s 6ms/step - reward: 0.0051
4 episodes - episode_reward: 14.750 [11.000, 18.000] - loss: 0.002 - mean_absolute_error: 0.569 - mean_q: 0.720 - mean_eps: 0.020 - ale.lives: 0.000

Interval 246 (2450000 steps performed)
10000/10000 [=====] - 59s 6ms/step - reward: 0.0034
3 episodes - episode_reward: 9.667 [1.000, 18.000] - loss: 0.002 - mean_absolute_error: 0.513 - mean_q: 0.647 - mean_eps: 0.020 - ale.lives: 0.000

Interval 247 (2460000 steps performed)
10000/10000 [=====] - 60s 6ms/step - reward: 0.0032
3 episodes - episode_reward: 13.333 [5.000, 19.000] - loss: 0.002 - mean_absolute_error: 0.524 - mean_q: 0.668 - mean_eps: 0.020 - ale.lives: 0.000

Interval 248 (2470000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: 0.0043
3 episodes - episode_reward: 12.333 [9.000, 17.000] - loss: 0.002 - mean_absolute_error: 0.548 - mean_q: 0.692 - mean_eps: 0.020 - ale.lives: 0.000

Interval 249 (2480000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: 0.0035
3 episodes - episode_reward: 10.667 [9.000, 12.000] - loss: 0.002 - mean_absolute_error: 0.542 - mean_q: 0.690 - mean_eps: 0.020 - ale.lives: 0.000

Interval 250 (2490000 steps performed)
10000/10000 [=====] - 60s 6ms/step - reward: 0.0035
3 episodes - episode_reward: 9.000 [5.000, 11.000] - loss: 0.002 - mean_absolute_error: 0.513 - mean_q: 0.656 - mean_eps: 0.020 - ale.lives: 0.000

Interval 251 (2500000 steps performed)
10000/10000 [=====] - 59s 6ms/step - reward: 0.0043
4 episodes - episode_reward: 13.000 [10.000, 18.000] - loss: 0.002 - mean_absolute_error: 0.555 - mean_q: 0.708 - mean_eps: 0.020 - ale.lives: 0.000

Interval 252 (2510000 steps performed)
10000/10000 [=====] - 58s 6ms/step - reward: 0.0027
3 episodes - episode_reward: 12.333 [4.000, 18.000] - loss: 0.002 - mean_absolute_error: 0.546 - mean_q: 0.696 - mean_eps: 0.020 - ale.lives: 0.000

Interval 253 (2520000 steps performed)
10000/10000 [=====] - 58s 6ms/step - reward: 0.0043
3 episodes - episode_reward: 13.333 [6.000, 19.000] - loss: 0.002 - mean_absolute_error: 0.526 - mean_q: 0.669 - mean_eps: 0.020 - ale.lives: 0.000

Interval 254 (2530000 steps performed)
10000/10000 [=====] - 58s 6ms/step - reward: 0.0031
3 episodes - episode_reward: 5.333 [-2.000, 11.000] - loss: 0.002 - mean_absolute_error: 0.504 - mean_q: 0.636 - mean_eps: 0.020 - ale.lives: 0.000

Interval 255 (2540000 steps performed)
10000/10000 [=====] - 59s 6ms/step - reward: 0.0057
4 episodes - episode_reward: 15.500 [13.000, 18.000] - loss: 0.002 - mean_absolute_error: 0.572 - mean_q: 0.725 - mean_eps: 0.020 - ale.lives: 0.000

Interval 256 (2550000 steps performed)
10000/10000 [=====] - 58s 6ms/step - reward: 0.0028
3 episodes - episode_reward: 13.333 [8.000, 19.000] - loss: 0.002 - mean_absolute_error: 0.551 - mean_q: 0.698 - mean_eps: 0.020 - ale.lives: 0.000

Interval 257 (2560000 steps performed)
10000/10000 [=====] - 59s 6ms/step - reward: 0.0018
3 episodes - episode_reward: 7.333 [1.000, 18.000] - loss: 0.002 - mean_absolute_error: 0.498 - mean_q: 0.630 - mean_eps: 0.020 - ale.lives: 0.000

Interval 258 (2570000 steps performed)
10000/10000 [=====] - 58s 6ms/step - reward: 0.0046
3 episodes - episode_reward: 11.333 [6.000, 16.000] - loss: 0.002 - mean_absolute_error: 0.511 - mean_q: 0.641 - mean_eps: 0.020 - ale.lives: 0.000

Interval 259 (2580000 steps performed)
10000/10000 [=====] - 58s 6ms/step - reward: 0.0033
3 episodes - episode_reward: 11.667 [9.000, 14.000] - loss: 0.002 - mean_absolute_error: 0.497 - mean_q: 0.629 - mean_eps: 0.020 - ale.lives: 0.000

Interval 260 (2590000 steps performed)
10000/10000 [=====] - 58s 6ms/step - reward: 0.0031
3 episodes - episode_reward: 8.667 [5.000, 14.000] - loss: 0.002 - mean_absolute_error: 0.518 - mean_q: 0.645 - mean_eps: 0.020 - ale.lives: 0.000

Interval 261 (2600000 steps performed)
10000/10000 [=====] - 58s 6ms/step - reward: 0.0019
3 episodes - episode_reward: 8.667 [5.000, 11.000] - loss: 0.002 - mean_absolute_error: 0.514 - mean_q: 0.643 - mean_eps: 0.020 - ale.lives: 0.000

Interval 262 (2610000 steps performed)
10000/10000 [=====] - 58s 6ms/step - reward: 0.0032
3 episodes - episode_reward: 10.333 [2.000, 17.000] - loss: 0.002 - mean_absolute_error: 0.472 - mean_q: 0.591 - mean_eps: 0.020 - ale.lives: 0.000

Interval 263 (2620000 steps performed)
10000/10000 [=====] - 58s 6ms/step - reward: 0.0026
3 episodes - episode_reward: 10.000 [8.000, 12.000] - loss: 0.002 - mean_absolute_error: 0.493 - mean_q: 0.624 - mean_eps: 0.020 - ale.lives: 0.000

Interval 264 (2630000 steps performed)
10000/10000 [=====] - 58s 6ms/step - reward: 0.0046
3 episodes - episode_reward: 10.000 [2.000, 16.000] - loss: 0.002 - mean_absolute_error: 0.468 - mean_q: 0.584 - mean_eps: 0.020 - ale.lives: 0.000

Interval 265 (2640000 steps performed)
10000/10000 [=====] - 58s 6ms/step - reward: 0.0032
3 episodes - episode_reward: 14.000 [10.000, 18.000] - loss: 0.002 - mean_absolute_error: 0.544 - mean_q: 0.684 - mean_eps: 0.020 - ale.lives: 0.000

Interval 266 (2650000 steps performed)
10000/10000 [=====] - 58s 6ms/step - reward: 0.0035
3 episodes - episode_reward: 10.333 [8.000, 12.000] - loss: 0.002 - mean_absolute_error: 0.495 - mean_q: 0.620 - mean_eps: 0.020 - ale.lives: 0.000

Interval 267 (2660000 steps performed)
10000/10000 [=====] - 59s 6ms/step - reward: 0.0053
4 episodes - episode_reward: 13.500 [11.000, 17.000] - loss: 0.002 - mean_absolute_error: 0.528 - mean_q: 0.667 - mean_eps: 0.020 - ale.lives: 0.000

Interval 268 (2670000 steps performed)
10000/10000 [=====] - 58s 6ms/step - reward: 0.0035
3 episodes - episode_reward: 10.000 [6.000, 15.000] - loss: 0.002 - mean_absolute_error: 0.518 - mean_q: 0.649 - mean_eps: 0.020 - ale.lives: 0.000

Interval 269 (2680000 steps performed)
10000/10000 [=====] - 58s 6ms/step - reward: 0.0029
3 episodes - episode_reward: 13.667 [12.000, 16.000] - loss: 0.002 - mean_absolute_error: 0.527 - mean_q: 0.663 - mean_eps: 0.020 - ale.lives: 0.000

Interval 270 (2690000 steps performed)
10000/10000 [=====] - 58s 6ms/step - reward: 0.0029
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3 episodes - episode_reward: 7.667 [5.000, 10.000] - loss: 0.002 - mean_absolute_error: 0.523 - mean_q: 0.652 - mean_eps: 0.020 - ale.lives: 0.000

Interval 271 (2700000 steps performed)
10000/10000 [=====] - 58s 6ms/step - reward: 0.0043
4 episodes - episode_reward: 12.000 [8.000, 18.000] - loss: 0.002 - mean_absolute_error: 0.498 - mean_q: 0.623 - mean_eps: 0.020 - ale.lives: 0.000

Interval 272 (2710000 steps performed)
10000/10000 [=====] - 58s 6ms/step - reward: 0.0043
3 episodes - episode_reward: 12.667 [8.000, 17.000] - loss: 0.002 - mean_absolute_error: 0.499 - mean_q: 0.631 - mean_eps: 0.020 - ale.lives: 0.000

Interval 273 (2720000 steps performed)
10000/10000 [=====] - 59s 6ms/step - reward: 0.0046
4 episodes - episode_reward: 13.250 [7.000, 17.000] - loss: 0.002 - mean_absolute_error: 0.515 - mean_q: 0.647 - mean_eps: 0.020 - ale.lives: 0.000

Interval 274 (2730000 steps performed)
10000/10000 [=====] - 58s 6ms/step - reward: 0.0040
3 episodes - episode_reward: 12.333 [8.000, 19.000] - loss: 0.002 - mean_absolute_error: 0.481 - mean_q: 0.600 - mean_eps: 0.020 - ale.lives: 0.000

Interval 275 (2740000 steps performed)
10000/10000 [=====] - 58s 6ms/step - reward: 0.0031
3 episodes - episode_reward: 12.000 [10.000, 15.000] - loss: 0.002 - mean_absolute_error: 0.504 - mean_q: 0.632 - mean_eps: 0.020 - ale.lives: 0.000

Interval 276 (2750000 steps performed)
10000/10000 [=====] - 59s 6ms/step - reward: 0.0036
3 episodes - episode_reward: 9.667 [8.000, 12.000] - loss: 0.002 - mean_absolute_error: 0.483 - mean_q: 0.602 - mean_eps: 0.020 - ale.lives: 0.000

Interval 277 (2760000 steps performed)
10000/10000 [=====] - 59s 6ms/step - reward: 0.0027
3 episodes - episode_reward: 10.333 [7.000, 15.000] - loss: 0.002 - mean_absolute_error: 0.452 - mean_q: 0.571 - mean_eps: 0.020 - ale.lives: 0.000

Interval 278 (2770000 steps performed)
10000/10000 [=====] - 60s 6ms/step - reward: 0.0023
2 episodes - episode_reward: 9.000 [9.000, 9.000] - loss: 0.002 - mean_absolute_error: 0.474 - mean_q: 0.599 - mean_eps: 0.020 - ale.lives: 0.000

Interval 279 (2780000 steps performed)
10000/10000 [=====] - 62s 6ms/step - reward: 0.0036
3 episodes - episode_reward: 11.667 [10.000, 14.000] - loss: 0.002 - mean_absolute_error: 0.426 - mean_q: 0.543 - mean_eps: 0.020 - ale.lives: 0.000

Interval 280 (2790000 steps performed)
10000/10000 [=====] - 64s 6ms/step - reward: 0.0015
3 episodes - episode_reward: 4.667 [-10.000, 12.000] - loss: 0.002 - mean_absolute_error: 0.432 - mean_q: 0.539 - mean_eps: 0.020 - ale.lives: 0.000

Interval 281 (2800000 steps performed)
10000/10000 [=====] - 63s 6ms/step - reward: 0.0037
3 episodes - episode_reward: 12.333 [10.000, 14.000] - loss: 0.002 - mean_absolute_error: 0.454 - mean_q: 0.571 - mean_eps: 0.020 - ale.lives: 0.000

Interval 282 (2810000 steps performed)
10000/10000 [=====] - 60s 6ms/step - reward: 0.0037
3 episodes - episode_reward: 10.333 [9.000, 11.000] - loss: 0.002 - mean_absolute_error: 0.480 - mean_q: 0.605 - mean_eps: 0.020 - ale.lives: 0.000

Interval 283 (2820000 steps performed)
10000/10000 [=====] - 60s 6ms/step - reward: 0.0025
3 episodes - episode_reward: 11.333 [9.000, 15.000] - loss: 0.002 - mean_absolute_error: 0.446 - mean_q: 0.563 - mean_eps: 0.020 - ale.lives: 0.000

Interval 284 (2830000 steps performed)
10000/10000 [=====] - 60s 6ms/step - reward: 0.0020
3 episodes - episode_reward: 4.333 [2.000, 8.000] - loss: 0.002 - mean_absolute_error: 0.446 - mean_q: 0.553 - mean_eps: 0.020 - ale.lives: 0.000

Interval 285 (2840000 steps performed)
10000/10000 [=====] - 60s 6ms/step - reward: 0.0025
3 episodes - episode_reward: 9.667 [2.000, 18.000] - loss: 0.002 - mean_absolute_error: 0.509 - mean_q: 0.632 - mean_eps: 0.020 - ale.lives: 0.000

Interval 286 (2850000 steps performed)
10000/10000 [=====] - 60s 6ms/step - reward: 0.0040
4 episodes - episode_reward: 12.250 [10.000, 14.000] - loss: 0.002 - mean_absolute_error: 0.496 - mean_q: 0.620 - mean_eps: 0.020 - ale.lives: 0.000

Interval 287 (2860000 steps performed)
10000/10000 [=====] - 60s 6ms/step - reward: 0.0029
3 episodes - episode_reward: 9.000 [1.000, 14.000] - loss: 0.002 - mean_absolute_error: 0.518 - mean_q: 0.647 - mean_eps: 0.020 - ale.lives: 0.000

Interval 288 (2870000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: 0.0019
3 episodes - episode_reward: 6.667 [6.000, 8.000] - loss: 0.002 - mean_absolute_error: 0.487 - mean_q: 0.607 - mean_eps: 0.020 - ale.lives: 0.000

Interval 289 (2880000 steps performed)
10000/10000 [=====] - 60s 6ms/step - reward: 0.0025
2 episodes - episode_reward: 6.500 [3.000, 10.000] - loss: 0.002 - mean_absolute_error: 0.445 - mean_q: 0.555 - mean_eps: 0.020 - ale.lives: 0.000

Interval 290 (2890000 steps performed)
10000/10000 [=====] - 60s 6ms/step - reward: 0.0034
3 episodes - episode_reward: 11.000 [6.000, 14.000] - loss: 0.002 - mean_absolute_error: 0.468 - mean_q: 0.583 - mean_eps: 0.020 - ale.lives: 0.000

Interval 291 (2900000 steps performed)
10000/10000 [=====] - 60s 6ms/step - reward: 0.0039
3 episodes - episode_reward: 15.000 [14.000, 17.000] - loss: 0.002 - mean_absolute_error: 0.507 - mean_q: 0.643 - mean_eps: 0.020 - ale.lives: 0.000

Interval 292 (2910000 steps performed)
10000/10000 [=====] - 60s 6ms/step - reward: 0.0056
4 episodes - episode_reward: 14.500 [8.000, 20.000] - loss: 0.002 - mean_absolute_error: 0.496 - mean_q: 0.625 - mean_eps: 0.020 - ale.lives: 0.000

Interval 293 (2920000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: 0.0055
4 episodes - episode_reward: 13.750 [11.000, 16.000] - loss: 0.002 - mean_absolute_error: 0.561 - mean_q: 0.710 - mean_eps: 0.020 - ale.lives: 0.000

Interval 294 (2930000 steps performed)
10000/10000 [=====] - 60s 6ms/step - reward: 0.0032
3 episodes - episode_reward: 10.333 [9.000, 12.000] - loss: 0.002 - mean_absolute_error: 0.571 - mean_q: 0.717 - mean_eps: 0.020 - ale.lives: 0.000

Interval 295 (2940000 steps performed)
10000/10000 [=====] - 60s 6ms/step - reward: 0.0038
3 episodes - episode_reward: 12.667 [11.000, 14.000] - loss: 0.002 - mean_absolute_error: 0.532 - mean_q: 0.668 - mean_eps: 0.020 - ale.lives: 0.000

Interval 296 (2950000 steps performed)
10000/10000 [=====] - 60s 6ms/step - reward: 0.0026
3 episodes - episode_reward: 8.333 [5.000, 10.000] - loss: 0.002 - mean_absolute_error: 0.528 - mean_q: 0.660 - mean_eps: 0.020 - ale.lives: 0.000

Interval 297 (2960000 steps performed)
10000/10000 [=====] - 60s 6ms/step - reward: 0.0033
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3 episodes - episode_reward: 10.000 [7.000, 13.000] - loss: 0.002 - mean_absolute_error: 0.505 - mean_q: 0.636 - mean_eps: 0.020 - ale.lives: 0.000

Interval 298 (2970000 steps performed)
10000/10000 [=====] - 61s 6ms/step - reward: 0.0043
4 episodes - episode_reward: 13.250 [11.000, 17.000] - loss: 0.002 - mean_absolute_error: 0.549 - mean_q: 0.692 - mean_eps: 0.020 - ale.lives: 0.000

Interval 299 (2980000 steps performed)
10000/10000 [=====] - 60s 6ms/step - reward: 0.0072
4 episodes - episode_reward: 17.750 [16.000, 19.000] - loss: 0.002 - mean_absolute_error: 0.558 - mean_q: 0.707 - mean_eps: 0.020 - ale.lives: 0.000

Interval 300 (2990000 steps performed)
10000/10000 [=====] - 60s 6ms/step - reward: 0.0028
done, took 18168.990 seconds
```