

```

1 /usr/local/bin/python3.9 /Applications/PyCharm.app/
  Contents/plugins/python-ce/helpers/pydev/pydevd.py
  --multiproc --qt-support=auto --client 127.0.0.1
  --port 63659 --file /Users/jadenkim/Desktop/
  McMaster/2022/Winter/00P/Assignment/2/part2.py
2 Connected to pydev debugger (build 212.5080.64)
3 Enter your distance 5-10: Enter initial velocity 1
  - 10: Enter travel time less than 10:
4 =====
  =====
5 Distance      Displacement      Acceleration
  Description
6 5.0 m          -600.0 m          -50.0 m/s^2
  Object A will not hit object B
7 5.0 m          -597.5 m          -49.8 m/s^2
  Object A will not hit object B
8 5.0 m          -595.0 m          -49.6 m/s^2
  Object A will not hit object B
9 5.0 m          -592.5 m          -49.4 m/s^2
  Object A will not hit object B
10 5.0 m         -590.0 m          -49.2 m/s^2
  Object A will not hit object B
11 5.0 m         -587.5 m          -49.0 m/s^2
  Object A will not hit object B
12 5.0 m         -585.0 m          -48.8 m/s^2
  Object A will not hit object B
13 5.0 m         -582.5 m          -48.6 m/s^2
  Object A will not hit object B
14 5.0 m         -580.0 m          -48.4 m/s^2
  Object A will not hit object B
15 5.0 m         -577.5 m          -48.2 m/s^2
  Object A will not hit object B
16 5.0 m         -575.0 m          -48.0 m/s^2
  Object A will not hit object B
17 5.0 m         -572.5 m          -47.8 m/s^2
  Object A will not hit object B
18 5.0 m         -570.0 m          -47.6 m/s^2
  Object A will not hit object B
19 5.0 m         -567.5 m          -47.4 m/s^2
  Object A will not hit object B
20 5.0 m         -565.0 m          -47.2 m/s^2

```

20	Object A will not hit object B
21	5.0 m -562.5 m -47.0 m/s^2 Object A will not hit object B
22	5.0 m -560.0 m -46.8 m/s^2 Object A will not hit object B
23	5.0 m -557.5 m -46.6 m/s^2 Object A will not hit object B
24	5.0 m -555.0 m -46.4 m/s^2 Object A will not hit object B
25	5.0 m -552.5 m -46.2 m/s^2 Object A will not hit object B
26	5.0 m -550.0 m -46.0 m/s^2 Object A will not hit object B
27	5.0 m -547.5 m -45.8 m/s^2 Object A will not hit object B
28	5.0 m -545.0 m -45.6 m/s^2 Object A will not hit object B
29	5.0 m -542.5 m -45.4 m/s^2 Object A will not hit object B
30	5.0 m -540.0 m -45.2 m/s^2 Object A will not hit object B
31	5.0 m -537.5 m -45.0 m/s^2 Object A will not hit object B
32	5.0 m -535.0 m -44.8 m/s^2 Object A will not hit object B
33	5.0 m -532.5 m -44.6 m/s^2 Object A will not hit object B
34	5.0 m -530.0 m -44.4 m/s^2 Object A will not hit object B
35	5.0 m -527.5 m -44.2 m/s^2 Object A will not hit object B
36	5.0 m -525.0 m -44.0 m/s^2 Object A will not hit object B
37	5.0 m -522.5 m -43.8 m/s^2 Object A will not hit object B
38	5.0 m -520.0 m -43.6 m/s^2 Object A will not hit object B
39	5.0 m -517.5 m -43.4 m/s^2 Object A will not hit object B
40	5.0 m -515.0 m -43.2 m/s^2 Object A will not hit object B

41	5.0 m	-512.5 m	-43.0 m/s ²
	Object A will not hit object B		
42	5.0 m	-510.0 m	-42.8 m/s ²
	Object A will not hit object B		
43	5.0 m	-507.5 m	-42.6 m/s ²
	Object A will not hit object B		
44	5.0 m	-505.0 m	-42.4 m/s ²
	Object A will not hit object B		
45	5.0 m	-502.5 m	-42.2 m/s ²
	Object A will not hit object B		
46	5.0 m	-500.0 m	-42.0 m/s ²
	Object A will not hit object B		
47	5.0 m	-497.5 m	-41.8 m/s ²
	Object A will not hit object B		
48	5.0 m	-495.0 m	-41.6 m/s ²
	Object A will not hit object B		
49	5.0 m	-492.5 m	-41.4 m/s ²
	Object A will not hit object B		
50	5.0 m	-490.0 m	-41.2 m/s ²
	Object A will not hit object B		
51	5.0 m	-487.5 m	-41.0 m/s ²
	Object A will not hit object B		
52	5.0 m	-485.0 m	-40.8 m/s ²
	Object A will not hit object B		
53	5.0 m	-482.5 m	-40.6 m/s ²
	Object A will not hit object B		
54	5.0 m	-480.0 m	-40.4 m/s ²
	Object A will not hit object B		
55	5.0 m	-477.5 m	-40.2 m/s ²
	Object A will not hit object B		
56	5.0 m	-475.0 m	-40.0 m/s ²
	Object A will not hit object B		
57	5.0 m	-472.5 m	-39.8 m/s ²
	Object A will not hit object B		
58	5.0 m	-470.0 m	-39.6 m/s ²
	Object A will not hit object B		
59	5.0 m	-467.5 m	-39.4 m/s ²
	Object A will not hit object B		
60	5.0 m	-465.0 m	-39.2 m/s ²
	Object A will not hit object B		
61	5.0 m	-462.5 m	-39.0 m/s ²

61	Object A will not hit object B
62	5.0 m -460.0 m -38.8 m/s^2
	Object A will not hit object B
63	5.0 m -457.5 m -38.6 m/s^2
	Object A will not hit object B
64	5.0 m -455.0 m -38.4 m/s^2
	Object A will not hit object B
65	5.0 m -452.5 m -38.2 m/s^2
	Object A will not hit object B
66	5.0 m -450.0 m -38.0 m/s^2
	Object A will not hit object B
67	5.0 m -447.5 m -37.8 m/s^2
	Object A will not hit object B
68	5.0 m -445.0 m -37.6 m/s^2
	Object A will not hit object B
69	5.0 m -442.5 m -37.4 m/s^2
	Object A will not hit object B
70	5.0 m -440.0 m -37.2 m/s^2
	Object A will not hit object B
71	5.0 m -437.5 m -37.0 m/s^2
	Object A will not hit object B
72	5.0 m -435.0 m -36.8 m/s^2
	Object A will not hit object B
73	5.0 m -432.5 m -36.6 m/s^2
	Object A will not hit object B
74	5.0 m -430.0 m -36.4 m/s^2
	Object A will not hit object B
75	5.0 m -427.5 m -36.2 m/s^2
	Object A will not hit object B
76	5.0 m -425.0 m -36.0 m/s^2
	Object A will not hit object B
77	5.0 m -422.5 m -35.8 m/s^2
	Object A will not hit object B
78	5.0 m -420.0 m -35.6 m/s^2
	Object A will not hit object B
79	5.0 m -417.5 m -35.4 m/s^2
	Object A will not hit object B
80	5.0 m -415.0 m -35.2 m/s^2
	Object A will not hit object B
81	5.0 m -412.5 m -35.0 m/s^2
	Object A will not hit object B

82	5.0 m	-410.0 m	-34.8 m/s ²
	Object A will not hit object B		
83	5.0 m	-407.5 m	-34.6 m/s ²
	Object A will not hit object B		
84	5.0 m	-405.0 m	-34.4 m/s ²
	Object A will not hit object B		
85	5.0 m	-402.5 m	-34.2 m/s ²
	Object A will not hit object B		
86	5.0 m	-400.0 m	-34.0 m/s ²
	Object A will not hit object B		
87	5.0 m	-397.5 m	-33.8 m/s ²
	Object A will not hit object B		
88	5.0 m	-395.0 m	-33.6 m/s ²
	Object A will not hit object B		
89	5.0 m	-392.5 m	-33.4 m/s ²
	Object A will not hit object B		
90	5.0 m	-390.0 m	-33.2 m/s ²
	Object A will not hit object B		
91	5.0 m	-387.5 m	-33.0 m/s ²
	Object A will not hit object B		
92	5.0 m	-385.0 m	-32.8 m/s ²
	Object A will not hit object B		
93	5.0 m	-382.5 m	-32.6 m/s ²
	Object A will not hit object B		
94	5.0 m	-380.0 m	-32.4 m/s ²
	Object A will not hit object B		
95	5.0 m	-377.5 m	-32.2 m/s ²
	Object A will not hit object B		
96	5.0 m	-375.0 m	-32.0 m/s ²
	Object A will not hit object B		
97	5.0 m	-372.5 m	-31.8 m/s ²
	Object A will not hit object B		
98	5.0 m	-370.0 m	-31.6 m/s ²
	Object A will not hit object B		
99	5.0 m	-367.5 m	-31.4 m/s ²
	Object A will not hit object B		
100	5.0 m	-365.0 m	-31.2 m/s ²
	Object A will not hit object B		
101	5.0 m	-362.5 m	-31.0 m/s ²
	Object A will not hit object B		
102	5.0 m	-360.0 m	-30.8 m/s ²

102	Object A will not hit object B
103	5.0 m -357.5 m -30.6 m/s ² Object A will not hit object B
104	5.0 m -355.0 m -30.4 m/s ² Object A will not hit object B
105	5.0 m -352.5 m -30.2 m/s ² Object A will not hit object B
106	5.0 m -350.0 m -30.0 m/s ² Object A will not hit object B
107	5.0 m -347.5 m -29.8 m/s ² Object A will not hit object B
108	5.0 m -345.0 m -29.6 m/s ² Object A will not hit object B
109	5.0 m -342.5 m -29.4 m/s ² Object A will not hit object B
110	5.0 m -340.0 m -29.2 m/s ² Object A will not hit object B
111	5.0 m -337.5 m -29.0 m/s ² Object A will not hit object B
112	5.0 m -335.0 m -28.8 m/s ² Object A will not hit object B
113	5.0 m -332.5 m -28.6 m/s ² Object A will not hit object B
114	5.0 m -330.0 m -28.4 m/s ² Object A will not hit object B
115	5.0 m -327.5 m -28.2 m/s ² Object A will not hit object B
116	5.0 m -325.0 m -28.0 m/s ² Object A will not hit object B
117	5.0 m -322.5 m -27.8 m/s ² Object A will not hit object B
118	5.0 m -320.0 m -27.6 m/s ² Object A will not hit object B
119	5.0 m -317.5 m -27.4 m/s ² Object A will not hit object B
120	5.0 m -315.0 m -27.2 m/s ² Object A will not hit object B
121	5.0 m -312.5 m -27.0 m/s ² Object A will not hit object B
122	5.0 m -310.0 m -26.8 m/s ² Object A will not hit object B

123	5.0 m	-307.5 m	-26.6 m/s ²
	Object A will not hit object B		
124	5.0 m	-305.0 m	-26.4 m/s ²
	Object A will not hit object B		
125	5.0 m	-302.5 m	-26.2 m/s ²
	Object A will not hit object B		
126	5.0 m	-300.0 m	-26.0 m/s ²
	Object A will not hit object B		
127	5.0 m	-297.5 m	-25.8 m/s ²
	Object A will not hit object B		
128	5.0 m	-295.0 m	-25.6 m/s ²
	Object A will not hit object B		
129	5.0 m	-292.5 m	-25.4 m/s ²
	Object A will not hit object B		
130	5.0 m	-290.0 m	-25.2 m/s ²
	Object A will not hit object B		
131	5.0 m	-287.5 m	-25.0 m/s ²
	Object A will not hit object B		
132	5.0 m	-285.0 m	-24.8 m/s ²
	Object A will not hit object B		
133	5.0 m	-282.5 m	-24.6 m/s ²
	Object A will not hit object B		
134	5.0 m	-280.0 m	-24.4 m/s ²
	Object A will not hit object B		
135	5.0 m	-277.5 m	-24.2 m/s ²
	Object A will not hit object B		
136	5.0 m	-275.0 m	-24.0 m/s ²
	Object A will not hit object B		
137	5.0 m	-272.5 m	-23.8 m/s ²
	Object A will not hit object B		
138	5.0 m	-270.0 m	-23.6 m/s ²
	Object A will not hit object B		
139	5.0 m	-267.5 m	-23.4 m/s ²
	Object A will not hit object B		
140	5.0 m	-265.0 m	-23.2 m/s ²
	Object A will not hit object B		
141	5.0 m	-262.5 m	-23.0 m/s ²
	Object A will not hit object B		
142	5.0 m	-260.0 m	-22.8 m/s ²
	Object A will not hit object B		
143	5.0 m	-257.5 m	-22.6 m/s ²

143	Object A will not hit object B
144	5.0 m -255.0 m -22.4 m/s^2
	Object A will not hit object B
145	5.0 m -252.5 m -22.2 m/s^2
	Object A will not hit object B
146	5.0 m -250.0 m -22.0 m/s^2
	Object A will not hit object B
147	5.0 m -247.5 m -21.8 m/s^2
	Object A will not hit object B
148	5.0 m -245.0 m -21.6 m/s^2
	Object A will not hit object B
149	5.0 m -242.5 m -21.4 m/s^2
	Object A will not hit object B
150	5.0 m -240.0 m -21.2 m/s^2
	Object A will not hit object B
151	5.0 m -237.5 m -21.0 m/s^2
	Object A will not hit object B
152	5.0 m -235.0 m -20.8 m/s^2
	Object A will not hit object B
153	5.0 m -232.5 m -20.6 m/s^2
	Object A will not hit object B
154	5.0 m -230.0 m -20.4 m/s^2
	Object A will not hit object B
155	5.0 m -227.5 m -20.2 m/s^2
	Object A will not hit object B
156	5.0 m -225.0 m -20.0 m/s^2
	Object A will not hit object B
157	5.0 m -222.5 m -19.8 m/s^2
	Object A will not hit object B
158	5.0 m -220.0 m -19.6 m/s^2
	Object A will not hit object B
159	5.0 m -217.5 m -19.4 m/s^2
	Object A will not hit object B
160	5.0 m -215.0 m -19.2 m/s^2
	Object A will not hit object B
161	5.0 m -212.5 m -19.0 m/s^2
	Object A will not hit object B
162	5.0 m -210.0 m -18.8 m/s^2
	Object A will not hit object B
163	5.0 m -207.5 m -18.6 m/s^2
	Object A will not hit object B

164	5.0 m	-205.0 m	-18.4 m/s ²
	Object A will not hit object B		
165	5.0 m	-202.5 m	-18.2 m/s ²
	Object A will not hit object B		
166	5.0 m	-200.0 m	-18.0 m/s ²
	Object A will not hit object B		
167	5.0 m	-197.5 m	-17.8 m/s ²
	Object A will not hit object B		
168	5.0 m	-195.0 m	-17.6 m/s ²
	Object A will not hit object B		
169	5.0 m	-192.5 m	-17.4 m/s ²
	Object A will not hit object B		
170	5.0 m	-190.0 m	-17.2 m/s ²
	Object A will not hit object B		
171	5.0 m	-187.5 m	-17.0 m/s ²
	Object A will not hit object B		
172	5.0 m	-185.0 m	-16.8 m/s ²
	Object A will not hit object B		
173	5.0 m	-182.5 m	-16.6 m/s ²
	Object A will not hit object B		
174	5.0 m	-180.0 m	-16.4 m/s ²
	Object A will not hit object B		
175	5.0 m	-177.5 m	-16.2 m/s ²
	Object A will not hit object B		
176	5.0 m	-175.0 m	-16.0 m/s ²
	Object A will not hit object B		
177	5.0 m	-172.5 m	-15.8 m/s ²
	Object A will not hit object B		
178	5.0 m	-170.0 m	-15.6 m/s ²
	Object A will not hit object B		
179	5.0 m	-167.5 m	-15.4 m/s ²
	Object A will not hit object B		
180	5.0 m	-165.0 m	-15.2 m/s ²
	Object A will not hit object B		
181	5.0 m	-162.5 m	-15.0 m/s ²
	Object A will not hit object B		
182	5.0 m	-160.0 m	-14.8 m/s ²
	Object A will not hit object B		
183	5.0 m	-157.5 m	-14.6 m/s ²
	Object A will not hit object B		
184	5.0 m	-155.0 m	-14.4 m/s ²

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184 Object A will not hit object B
185 5.0 m          -152.5 m          -14.2 m/s^2
    Object A will not hit object B
186 5.0 m          -150.0 m          -14.0 m/s^2
    Object A will not hit object B
187 5.0 m          -147.5 m          -13.8 m/s^2
    Object A will not hit object B
188 5.0 m          -145.0 m          -13.6 m/s^2
    Object A will not hit object B
189 5.0 m          -142.5 m          -13.4 m/s^2
    Object A will not hit object B
190 5.0 m          -140.0 m          -13.2 m/s^2
    Object A will not hit object B
191 5.0 m          -137.5 m          -13.0 m/s^2
    Object A will not hit object B
192 5.0 m          -135.0 m          -12.8 m/s^2
    Object A will not hit object B
193 5.0 m          -132.5 m          -12.6 m/s^2
    Object A will not hit object B
194 5.0 m          -130.0 m          -12.4 m/s^2
    Object A will not hit object B
195 5.0 m          -127.5 m          -12.2 m/s^2
    Object A will not hit object B
196 5.0 m          -125.0 m          -12.0 m/s^2
    Object A will not hit object B
197 5.0 m          -122.5 m          -11.8 m/s^2
    Object A will not hit object B
198 5.0 m          -120.0 m          -11.6 m/s^2
    Object A will not hit object B
199 5.0 m          -117.5 m          -11.4 m/s^2
    Object A will not hit object B
200 5.0 m          -115.0 m          -11.2 m/s^2
    Object A will not hit object B
201 5.0 m          -112.5 m          -11.0 m/s^2
    Object A will not hit object B
202 5.0 m          -110.0 m          -10.8 m/s^2
    Object A will not hit object B
203 5.0 m          -107.5 m          -10.6 m/s^2
    Object A will not hit object B
204 5.0 m          -105.0 m          -10.4 m/s^2
    Object A will not hit object B

```

205	5.0 m	-102.5 m	-10.2 m/s ²
	Object A will not hit object B		
206	5.0 m	-100.0 m	-10.0 m/s ²
	Object A will not hit object B		
207	5.0 m	-97.5 m	-9.8 m/s ²
	Object A will not hit object B		
208	5.0 m	-95.0 m	-9.6 m/s ²
	Object A will not hit object B		
209	5.0 m	-92.5 m	-9.4 m/s ²
	Object A will not hit object B		
210	5.0 m	-90.0 m	-9.2 m/s ²
	Object A will not hit object B		
211	5.0 m	-87.5 m	-9.0 m/s ²
	Object A will not hit object B		
212	5.0 m	-85.0 m	-8.8 m/s ²
	Object A will not hit object B		
213	5.0 m	-82.5 m	-8.6 m/s ²
	Object A will not hit object B		
214	5.0 m	-80.0 m	-8.4 m/s ²
	Object A will not hit object B		
215	5.0 m	-77.5 m	-8.2 m/s ²
	Object A will not hit object B		
216	5.0 m	-75.0 m	-8.0 m/s ²
	Object A will not hit object B		
217	5.0 m	-72.5 m	-7.8 m/s ²
	Object A will not hit object B		
218	5.0 m	-70.0 m	-7.6 m/s ²
	Object A will not hit object B		
219	5.0 m	-67.5 m	-7.4 m/s ²
	Object A will not hit object B		
220	5.0 m	-65.0 m	-7.2 m/s ²
	Object A will not hit object B		
221	5.0 m	-62.5 m	-7.0 m/s ²
	Object A will not hit object B		
222	5.0 m	-60.0 m	-6.8 m/s ²
	Object A will not hit object B		
223	5.0 m	-57.5 m	-6.6 m/s ²
	Object A will not hit object B		
224	5.0 m	-55.0 m	-6.4 m/s ²
	Object A will not hit object B		
225	5.0 m	-52.5 m	-6.2 m/s ²

225	Object A will not hit object B
226	5.0 m -50.0 m -6.0 m/s ²
	Object A will not hit object B
227	5.0 m -47.5 m -5.8 m/s ²
	Object A will not hit object B
228	5.0 m -45.0 m -5.6 m/s ²
	Object A will not hit object B
229	5.0 m -42.5 m -5.4 m/s ²
	Object A will not hit object B
230	5.0 m -40.0 m -5.2 m/s ²
	Object A will not hit object B
231	5.0 m -37.5 m -5.0 m/s ²
	Object A will not hit object B
232	5.0 m -35.0 m -4.8 m/s ²
	Object A will not hit object B
233	5.0 m -32.5 m -4.6 m/s ²
	Object A will not hit object B
234	5.0 m -30.0 m -4.4 m/s ²
	Object A will not hit object B
235	5.0 m -27.5 m -4.2 m/s ²
	Object A will not hit object B
236	5.0 m -25.0 m -4.0 m/s ²
	Object A will not hit object B
237	5.0 m -22.5 m -3.8 m/s ²
	Object A will not hit object B
238	5.0 m -20.0 m -3.6 m/s ²
	Object A will not hit object B
239	5.0 m -17.5 m -3.4 m/s ²
	Object A will not hit object B
240	5.0 m -15.0 m -3.2 m/s ²
	Object A will not hit object B
241	5.0 m -12.5 m -3.0 m/s ²
	Object A will not hit object B
242	5.0 m -10.0 m -2.8 m/s ²
	Object A will not hit object B
243	5.0 m -7.5 m -2.6 m/s ²
	Object A will not hit object B
244	5.0 m -5.0 m -2.4 m/s ²
	Object A will not hit object B
245	5.0 m -2.5 m -2.2 m/s ²
	Object A will not hit object B

```
246 5.0 m      0.0 m      -2.0 m/s^2
      Object A will not hit object B
247 5.0 m      2.5 m      -1.8 m/s^2
      Object A will not hit object B
248 5.0 m      5.0 m      -1.6 m/s^2
      Object A will hit object B
249 5.0 m      7.5 m      -1.4 m/s^2
      Object A will hit object B
250 5.0 m      10.0 m     -1.2 m/s^2
      Object A will hit object B
251 5.0 m      12.5 m     -1.0 m/s^2
      Object A will hit object B
252 5.0 m      15.0 m     -0.8 m/s^2
      Object A will hit object B
253 5.0 m      17.5 m     -0.6 m/s^2
      Object A will hit object B
254 5.0 m      20.0 m     -0.4 m/s^2
      Object A will hit object B
255 5.0 m      22.5 m     -0.2 m/s^2
      Object A will hit object B
256 =====
      =====
257
258 Process finished with exit code 0
259
```