

Final Performance Test Code

```
reverse(1); //reverse back motor  
motorSpeed(2,40); //set front motor to 40% power  
motorSpeed(1,40); //set back motor to 40% power  
goToAbsolutePosition(142); //run at current speed until reaching absolute position 142  
marks
```

```
brake(4); //brake both of motors
```

```
while(getVehiclePostion()<295){  
} //coast until reaching absolute position 295 marks
```

```
//power braking  
reverse(1);  
motorSpeed(1,50);  
goFor(0.5);
```

```
//wait in front of gate for 7.5 seconds  
motorSpeed(4,0);  
goFor(7.5);
```

```
reverse(1); //reverse back motor  
motorSpeed(4,30); //set both of motors to 30% power  
goToAbsolutePosition(440); //run at current speed until reaching absolute position 440  
marks
```

```
brake(4); //brake both of motors
```

```
while(getVehiclePostion()<624){
```

```
} //coast until reaching absolute position 624 marks
```

```
//power braking
```

```
reverse(1);  
motorSpeed(1,50);  
goFor(1);
```

```
//connect with cargo train and wait at loading zone for 5.5 seconds
```

```
motorSpeed(4,0);  
goFor(5.5);
```

```
reverse(2); //reverse front motor
```

```
motorSpeed(4,53); //set both of motors to 53% power  
goToAbsolutePosition(457); //run at current speed until reaching absolute position 457  
marks
```

```
brake(4); //brake both of motors
```

```
while(getVehiclePostion()>358){
```

```
}//coast until reaching absolute position 358 marks
```

```
//power braking
```

```
reverse(2);  
motorSpeed(2,50);  
goFor(1.5);
```

```
//wait in front of gate for 7.5 seconds
```

```
motorSpeed(4,0);  
goFor(7.5);
```

```
reverse(2); //reverse front motor  
motorSpeed(4,43); //set both of motors to 43% power  
goToAbsolutePosition(165); //run at current speed until reaching absolute position 165  
marks
```

```
brake(4); //brake both of motors
```

```
while(getVehiclePostion()>37){  
} //coast until reaching absolute position 37 marks
```

```
//power braking  
reverse(4);  
motorSpeed(4,45);  
goFor(1.5);
```