Q1

Modules: It contains several modules in the program, such as advent.dat; adventure.py; data.py;game.py; etc.

Packages: It gathe all modules in two packages—test package and the game running package.

Classes: The program creates classes to wrap similar functions together.

Q2

meaningful names:   
game.py Ln1567 resume: it means resuming playing the game.  
game.py Ln1649 compute\_score: this function is used to compute how many score you have got in this game.  
  
unmeaningful name:  
many functions defined in data.py have not used meaningful names, like section1, section2, ... I cannot see the what the function do by its name, so it’s not a good function name.

Q3

funcitons that only do one thing:  
play.py Ln29 function resume: this function just resumes the game when you restart playing the game.  
model.py Ln79 function is\_dark: this function just return the oposite of the return of the function is\_light.  
  
functions that do more than one thing:  
adventure.py Ln19 funcition loop(): it first gets a list args, then according to the contents of args, it has different reactions.  
data.py Ln146 section7: it first makes an adjustment, and then returns differnt values based on that adjustment.

Q4

game.py Ln188: Though the name of the function is move\_dwarves, it may cause self.die () in Ln318 at the end unintentionally.

Q5

The resume functions that both defined in game.py(Ln1567) and play.py(Ln29) could be made into a function.

Q6

The program does use exception handling in game.py Ln 1554, but it does not contain a corresponding except part.

Q7

Yes, game class has several responsibilities including managing game starting; handling actions; and reporting what has happened.

Q8

there are cohesive as well as non-cohesive clasees in the program. Game class(game.py Ln19) contains large number of attributes, thus the methods just use small part of them.

Q9

the author uses two approaches to comment the code. One is ‘’’ ‘’’; the other is #  
good comments:  
game.py Ln45 # counts down from finding last treasure: this is a good comment help me understand the meaning of the purpose of the statement.

Q10

game.py Ln 44 and Ln52: these two lines are left blank intentionally to seperate different part of the code.

Q11

All tests pass the tests.   
It meet the Fast, Independent, Repeatable, Self-Validating criteria, but do not meet Timely, since I have to run the test after all the modules have been written.  
Fast:The test have been run in short time.  
Independent: tests do not depend on each other.  
Repeatable: the test can be repeated in any environment  
Self-Validating: the result of the test can only be either pass of fail.