# Worksheet 2a Selection Answers

1. Mark each statement as being correct, or incorrect. If incorrect, state the correct operator.

|  |  |  |
| --- | --- | --- |
| Program | Correct? | Correct Operator |
| if price < 1000:  print(“Too expensive”) | Incorrect | > |
| if password == correctPassword:  print(“Error, incorrect password”) | Incorrect | != |
| if score >= 60:  print(“Test passed”) | Correct |  |
| if guess < target:  print(“Guess lower!”) | Incorrect | > |
| if balance > 100:  print(“Balance of £100 or more confirmed”) | Incorrect | >= |
| if lives <= 0:  print(“Game over”) | Correct |  |

1. Write a program that will ask for two numbers. Use a series of if statements to display whether the two numbers are the same or different, and if relevant, which one is larger.

numOne = int(input(“Enter number 1: ”))  
numTwo = int(input(“Enter number 2: ”))  
  
if numOne == numTwo:  
 print(“The numbers are the same!”)  
  
elif numOne != numTwo:  
 print(“The numbers are different!”)  
  
elif numOne > numTwo:  
 print(“Number one is bigger”)  
  
else:  
 print(“Number two is bigger”)

1. Write a program that will ask for a favourite genre (type) of music, and then make a recommendation. For example, if they like rock then they should listen to the Kaiser Chiefs, or if they like R&B they should listen to Rihanna.

genre = input(“What is your favourite type of music? “)  
  
if genre == “rock”:  
 print(“Try the Kaiser Chiefs”)

elif genre == “r&b”:  
 print(“Check out Rihanna”)  
elif genre == “indie”:  
 print(“You might like Two Door Cinema Club”)  
elif genre == “pop”:  
 print(“Union J are popular right now”)  
else:  
 print(“Sorry, no suggestions. Try rock, r&b, indie or pop”)

1. Write a multiple choice quiz on a topic of your choosing. There should be 5 questions and each question should have 3 possible answers. Use if statements to tell the user if they were correct and to keep a running total of their score. At the end of the quiz, display a suitable message to the user – either “You’re a genius”, “Not bad”, or “Must try harder” depending on the user’s score.

score = 0  
  
# Question 1  
  
print(“Charles Babbage designed what computing device in 1822?”)  
print(“A. The Difference Engine”)  
print(“B. The Analytical Engine”)  
print(“C. The Slide Rule”)   
  
answer = input(“Enter your answer as a single capital letter: ”)  
if answer == “A”:  
 score = score + 1  
 print(“Well done!”)  
else:  
 print(“Sorry, that’s not right”)  
  
# Repeat for questions 2-5  
  
# Display total and message  
  
print(“You scored”, score)  
  
if score >= 4:  
 print(“You’re a genius!”)  
elif score >= 2:  
 print(“Not bad”)  
else:  
 print(“Must try harder”)