**Certificate Programme in Python Programming**

**Fundamentals of Programming**

**Assignment 1**

**(25% of the Total Score)**

|  |  |  |  |
| --- | --- | --- | --- |
| Name: | Siu Leung Ngai Arran | Student No: | 30317406 |

**Question 1 – 5 marks**

**Highlight Incorrect Code**

|  |
| --- |
| drink = input("How many you want to buy? ")  if drink <= 0:  print (Invalid value)  else if (drink > 0 & drink < 10):  print ("Delivery fee: $50")  else  print ("Free delivery") |

**Modified Code**

|  |
| --- |
| drink = int(input("How many you want to buy? "))  if drink <= 0:  print ("Invalid value")  elif (drink > 0 and drink < 10):  print ("Delivery fee: $50")  else:  print ("Free delivery") |

**Question 2 – 6 marks**

**Program Code**

|  |
| --- |
| #user input variable integer last  last = int(input("Input an integer: "))  #variable result to store result and initialize it to 1  result = 1  #print the first part of the output  print("Sum from 1 to", last, " = 1", end="")  #calculate the result and print the middle part of the output  for i in range(2, last + 1):  result += i  print(" +", i, end="")  #print the last past of the output  print(" =", result) |

**Question 3 – 7 marks**

**Program Code**

|  |
| --- |
| #user input startPoint  startPoint = int(input("Starting point: "))  #user input endPoint  endPoint = int(input("Ending point: "))  #string variable result to store the result  result = ""  #loop from start to end  for index in range(startPoint, endPoint + 1):  #if index can be divided by 7, append a space and the number to the end of the result  if (index % 7 == 0):  result = result + " " + str(index)  if (result == ""):  #print the line if result string is empty  print("No integers within the range can be divided by 7.")  else:  #otherwise, print the result from the second character to omit the leading space  print("Numbers that can be divided by 7 between", startPoint, "and", endPoint)  print(result[1:]) |

**Question 4 – 7 marks**

**Program Code**

|  |
| --- |
| #user input line  line = input("Input a string: ")  #initialize result to 0  counter = 0  #for each character ch in line  for ch in line:  #if it is not a space, increment the counter  if (ch != " "):  counter += 1  print("Number of characters (no spaces):", counter) |

**-------- End of Assignment 1 --------**