**Question 1:**

**Finding an Armstrong number:**

An Armstrong number of three digits is an integer such that the sum of the cubes of its digits is equal to the number itself. For example, 371 is an Armstrong number since 3\*\*3 + 7\*\*3 + 1\*\*3 = 371.

N

Y

PRINT “No Armstrong”

PRINT “Armstrong”

IS

sum = m

r=n%10

sum=sum+(r\*r\*r)

n=n/10;

N

Y

IS

n > 0

m = n

sum = 0

READ n

**Question 2:**

Draw and submit flowchart for a cashier program. The program works as follows:

* 1. First it asks user to enter the code of the item purchased by a customer.
  2. If item code is valid, the description and price for that code is displayed on the screen.
  3. If item code is invalid, message is displayed “Item Code doesn’t exists”.
  4. Then it asks for the quantity of the particular item code entered. If quantity is less than zero, it prompts user to enter quantity greater than zero.
  5. It displays the subtotal thereafter.
  6. Moreover, it keeps on accepting item codes until ‘0’ is pressed.
  7. Consequently, it displays the total amount due.
  8. Then, it asks the user to tender the amount of cash of the customer. It should not accept amount of cash less than the amount due.
  9. Finally, it displays the change.

sub\_total =0

price = 0

quantity = 0

GT = 0

**READ** code

**IF**

code != 0

and code != 0

Y

N

Y

**IF**

quantity < 0

**READ** quantity

**PRINT**

“Item Code doesn’t exists”

N

**PRINT**

Description

Price

Y

**IF**

code is valid

and code != 0

sub\_total = price\*quantity

GT = GT + sub\_total

**WRITE**

GT

**PRINT**

quantity < 0

is not valid

**READ**

cash

**WRITE**

Change

N

Change = cash - GT

Y

**IF**

cash < GT