Question 2
Chapter1:
Coding:

```
import time
current_time = int(time.time())
genetated_number = (current_time % 100) + 50
if genetated_number % 2 == 0:
    genetated_number += 10

from PIL import Image
img = Image.open('chapter1.jpg')
pixels = img.load()

for i in range(img.width):
    for j in range(img.height):
        r, g, b = pixels[i, j]
        pixels[i, j] = (min(255, r +
genetated_number), min(255, g + genetated_number),
min(255, b + genetated_number))

img.save('chapter1out.png')

red_sum = 0

for i in range(img.width):
    for j in range(img.height):
        r, _, _ = pixels[i, j]
        red_sum += r
print(red_sum)
```

The output of image:

Chapter 2:
Coding:

```
string = '56aAww1984sktr235270aYmn145ss785fsq31D0'

number_string = ''.join([char for char in string
if char.isdigit()])
letter_string = ''.join([char for char in string
if char.isalpha()])

even_numbers = [int(char) for char in
number_string if int(char) % 2 == 0]
ascii_even_numbers = [ord(str(num)) for num in
even_numbers]
```

```
uppercase_letters = [char for char in
letter_string if char.isupper()]
ascii_uppercase_letters = [ord(char) for char in
uppercase_letters]

print("Number String:", number_string)
print("Letter String:", letter_string)
print("Even Numbers:", even_numbers)
print("ASCII Code for Even Numbers:",
ascii_even_numbers)
print("Uppercase Letters:", uppercase_letters)
print("ASCII Code for Uppercase Letters:",
ascii_uppercase_letters)

ciphered_quote = "VZ FRYSVFU VZCNGVRAG NAQ N
YVGGYR VAFRPHER V ZNXR ZVFGNXRF V NZ BHG BS
PBAGEBY NAQNG GVZRF UNEQ GB UNAQYR OHG VS LBH PNAG
UNAQYR ZR NG ZL JBEFG GURA LBH FHER NF URYYQBAG
QRFREIR ZR NG ZL ORFG ZNEVYLA ZBAEBR"

def decrypt(cipher, shift):
    decrypted = []
    for char in cipher:
        if char.isalpha():
            shifted = chr((ord(char) - ord('A') -
shift) % 26 + ord('A'))
            decrypted.append(shifted)
        else:
            decrypted.append(char)
    return ''.join(decrypted)

for s in range(1, 26):
    print(f"Shift {s}: {decrypt(ciphered_quote,
s)}")
```

The output is:

Shift 13: IM SELFISH IMPATIENT AND A LITTLE INSECURE I MAKE MISTAKES I AM OUT OF CONTROL ANDAT TIMES HARD TO HANDLE BUT IF YOU CANT HANDLE ME AT MY WORST THEN YOU SURE AS HELLDONT DESERVE ME AT MY BEST MARILYN MONROE