

```

1  # Question 1
2
3  x = 9
4  while x < 20:
5      x = x + 1
6      print(f"The square of {x} is {x * x}. The cube of {x} is {x * x * x}" )
7
8  # Question 2
9
10 month = input("What is your favorite month of the year? " )
11 number = input("What is your favorite number? " )
12 animal = input("What is your favorite animal? " )
13 print("Your new password is a concatenation of the three answers that you gave" )
14 password = month + number + animal
15 guess = 0
16 while guess != password:
17     guess = input("Enter your new password to proceed: " )
18 print("Password accepted." )
19
20 # Question 3
21
22 x = 0
23 while x < 4:
24     x = x + 1
25     print("*" * x)
26 while x > 1:
27     x = x - 1
28     print("*" * x)
29
30 # Question 4
31
32 x = 0
33 while x < 4:
34     x = x + 1
35     print(" " * (4 - x) + "* " * x)
36 while x > 1:
37     x = x - 1
38     print(" " * (4 - x) + "* " * x)
39
40 # Question 5
41
42 while True:
43     a = input("First number? ")
44     b = input("Second number? ")
45     max_attempts = 3
46     try:
47         a, b = int(a), int(b)
48     except:
49         print("Incorrect input")
50         continue
51     else:
52         break
53
54 guess = 0
55 attempts = 0
56 while guess != (a * b) and attempts < 3:
57     attempts = attempts + 1
58     while True:

```

```
59     guess = input(f"Attempt #{attempts}. What is {a} * {b}? " )
60     try:
61         guess = int(guess)
62     except:
63         print("Incorrect input")
64         continue
65     else:
66         break
67
68 print(f"Your answer is {guess}. Correct answer is {a * b}" )
69
```