

```
1  # Program to demonstrate if/else statements.
2  #
3  # This program compares two strings.
4  # Get a password from the user.
5  #
6  password = input('Enter the password: ')
7
8  # Determine whether the correct password was entered.
9  if password == 'prospero': # Other comparison symbols: <, >, <=, >=, !=
10     print('Password accepted.')
11 else:
12     print('Sorry, that is the wrong password.')
13     print('Please try again.')
```

Enter the password: notsure
Sorry, that is the wrong password.
Please try again.

Enter the password: prospero
Password accepted.

```

1  # This program determines whether a bank customer qualifies for a loan.
2
3  min_salary = 30000.0 # The minimum annual salary
4  min_years = 2        # The minimum years on the job
5
6  # Get the customer's annual salary.
7  salary = eval(input('Enter your annual salary: '))
8
9  # Get the number of years on the current job.
10 years_on_job = eval(input('Enter the number of years employed: '))
11
12 # Determine whether the customer qualifies.
13 if salary >= min_salary or years_on_job >= min_years: # Logical operator: or, and
14     print('You qualify for the loan.')
15 else:
16     print('You do not qualify for this loan.')
17

```

Enter your annual salary: 90000
Enter the number of years employed: 1
You qualify for the loan.

Enter your annual salary: 29000
Enter the number of years employed: 1
You do not qualify for this loan.

Program examples using logical operators . . .

```

score = 90
if (score >= 80) and (score <= 93):
    print("You got an B")

answer = 'y'
if (answer == 'y') or (answer == 'Y'):
    print("You have answered yes – correct answer!")

```

```

1  # This program demonstrates statements if/elif/else
2  #
3  code = input("Type a 2-letter state code that starts with letter C: ")
4  if code == 'CA':
5      print("CA is California")
6  elif code == 'CO':
7      print("CO is Colorado")
8  elif code == 'CT':
9      print("CT is Connecticut")
10 else:
11     print("Invalid. Please enter a valid state code that starts with letter C")
12 print("Thank You!")
13

```

Type a 2-letter state code that starts with letter C: CA
 CA is California
 Thank You!

Type a 2-letter state code that starts with letter C: NY
 Invalid. Please enter a valid state code that starts with letter C
 Thank You!

Implementing case insensitive

```

string1 = "Hello"
string2 = "hello"

if (string1.lower() == string2.lower()):
    print ("The strings are the same.")
else:
    print ("The strings are not the same.")

```

Generating random numbers

```

import random
x = random.randint(0,5) # generate number between 0 to 5
print ("Random number is = ", x)

```