

```
#1.
scores = []
for i in range(10):
    score = float(input(f"Enter test score #{i+1}: "))
    scores.append(score)

sorted_scores = sorted(scores)
smallest_score = sorted_scores[0]
second_smallest_score = sorted_scores[1]
print(f"Smallest score: {smallest_score}")
print(f"Second smallest score: {second_smallest_score}")

for score in scores:
    if score > 100:
        print("Warning: A score over 100 has been entered.")
        break

scores_after_dropping_lowest = sorted_scores[2:]
average_score = (sum(scores_after_dropping_lowest)/len(scores_after_dropping_lowest))
print(f"Average score after dropping the two lowest: {average_score}")

... Enter test score #1: 
```

```
#2.
import random
score = 0
for i in range(5):
    random_number = random.randint(1, 10)
    guess = int(input("Enter a number between 1 to 10: "))
    if guess == random_number:
        score += 10
        print("You win! Got 10 points")
        print()
    else:
        score -= 1
        print("You lose, the number was", random_number)
        print()

print("Your total score is:", score)
```

```
Enter a number between 1 to 10: 3
You win! Got 10 points
```

```
Enter a number between 1 to 10: 4
You win! Got 10 points
```

```
Enter a number between 1 to 10: 4
You lose, the number was 2
```

```
Enter a number between 1 to 10: 4
You lose, the number was 2
```

```
Enter a number between 1 to 10: 1
You lose, the number was 5
```

```
Your total score is: 17
```

```
#3.
count = 0
non_perfect_cubes = []
for k in range(1, 1001):
    cube_root = round(k ** (1/3))
    if cube_root ** 3 == k:
        count += 1

    else:
        non_perfect_cubes.append(k)

if len(non_perfect_cubes) == 10:
    break

print("There are", 1000 - count, "integers that are not perfect cubes.")
print("The first 10 non-perfect cube integers are:", non_perfect_cubes)
```

There are 998 integers that are not perfect cubes.
The first 10 non-perfect cube integers are: [2, 3, 4, 5, 6, 7, 9, 10, 11, 12]

```
#4.
total_sum = 0
for i in range(1,2000,2):
    total_sum += i
print("The sum of odd numbers from 1 to 1999 is:", total_sum)
```

The sum of odd numbers from 1 to 1999 is: 1000000

```
#5.
import math
num = int(input('Enter the value of n: '))
sum = 0
for i in range(1, num+1):
    sum += 1/i
res = sum - math.log(num)
print('The result is',res)
```

Enter the value of n: 6
The result is 0.6582405307719448

```
#6.  
total = 0  
for i in range(1, 2001):  
    if i % 2 == 0:  
        total -= i  
    else:  
        total += i  
  
print("The sum of the series is:", total)  
  
The sum of the series is: -1000
```