

1. Write a Python program that prompts the user for a number. Depending on whether the number is even or odd, print out an appropriate message to the user.
2. Write a Python program that calculates the area of a circle based on the radius entered by the user.
3. Write a Python program to calculate the difference between a given number and 17. If the number is greater than 17, return twice the absolute difference.
4. Write a Python program to calculate the sum of three given numbers. If the values are equal, return three times their sum.
5. Write a Python program to count the number 4 in a given list.
6. What is the output of the below code?

```
>>> class Person:
>>>     def __init__(self, name, age):
>>>         self.name = name
>>>         self.age = age
>>>
>>>     def birthday(self):
>>>         self.age += 1
>>>
>>> p1 = Person("Smith", 24)
>>> p2 = Person("Chris", 30)
>>> for _ in range(10):
>>>     p2.birthday()
>>> num = p1.age + p2.age
>>> print(num)
```

7. What is the output of the below code?

```
>>> class Reeta:
```

```
>>>     name = "Reeta"
```

```
>>>     blood_group = "B Positive"
```

```
>>> class Priyanka(Reeta):
```

```
>>>     name = "Priyanka"
```

```
>>> person = Priyanka()
```

```
>>> print(person.name, "-", person.blood_group)
```

Priyanka – B Positive

Reeta – B Positive

Runtime error

8. Write a Python class BankAccount with attributes such as account_number, balance, date_of_opening, and customer_name, and methods like deposit, withdraw, and check_balance. *make an object and call the*
9. Insert the correct method for creating a NumPy array.
10. Write a NumPy program to generate a random number between 0 and 1.