In [7]:
```
#Question1
#Create a function, and list out the items in the list
def Subfields():
    mylist=["Sub-fields in AI are:","Machine Learning","Neural Networks","Vision",'
    for temp in mylist:
        print(temp)
```

In [8]:
```
Subfields()
```

```
Sub-fields in AI are:
Machine Learning
Neural Networks
Vision
Robotics
Speech Processing
Natural Language Processing
```

In [9]:
```
#Question2
#Create OddEven function
def OddEven():
    givenNumber=int(input("Enter a number:"))
    if(givenNumber%2==0):
        print(givenNumber,"is even number")
    else:
        print(givenNumber,"is odd number")
```

In [10]:
```
OddEven()
```

```
Enter a number:52452
52452 is even number
```

In [11]:
```
#Question2
#Create a function that tells elegibility of marriage for male and female according
def elegibility():
    getGender=input("Your Gender:")
    getAge=int(input("Your age:"))
    if(getGender=="male" and getAge>=21):
        print("ELIGIBLE")
    elif(getGender=="female" and getAge>=18):
        print("ELIGIBLE")
    else:
        print("NOT ELIGIBLE")
```

In [12]:
```
elegibility()
```

```
Your Gender:male
Your age:20
NOT ELIGIBLE
```

In [13]:
```
#Question3
#calculate the percentage of your 10th mark
def percentage():
    subject1=98
    subject2=87
    subject3=95
    subject4=95
    subject5=93
    total=(subject1+subject2+subject3+subject4+subject5)/500
    percent=total*100
    print("Subject1=",subject1)
    print("Subject2=",subject2)
    print("Subject3=",subject3)
```

```
    print("Subject4=",subject4)
    print("Subject5=",subject5)
    print("total:",total)
    print("percentage",percent)
```

In [14]:
```
percentage()
```

```
Subject1= 98
Subject2= 87
Subject3= 95
Subject4= 95
Subject5= 93
total: 0.936
percentage 93.60000000000001
```

In [5]:
```
#Question4
#print area and perimeter of triangle using class and functions
def triangle():
    getHeight=int(input("Height:"))
    getBreadth=int(input("Breadth:"))
    print("Area formula:","(Height*Breadth)/2")
    AreaFormula=(getHeight*getBreadth)/2
    AreaOfTriangle=AreaFormula
    print("Area of Triangle:",AreaOfTriangle)

    getHeight1=int(input("Height1:"))
    getHeight2=int(input("Height2:"))
    getBreadth1=int(input("Breadth:"))
    PerimeterFormula=getHeight1+getHeight2+getBreadth1
    PerimeterOfTriangle=PerimeterFormula

    print("Height:",getHeight)
    print("Breadth:",getBreadth)


    print("Height1:",getHeight1)
    print("Height2:",getHeight2)
    print("Breadth1:",getBreadth1)
    print("Perimeter formula:","Height1+Height2+Breadth")
    print("Perimeter formula:",PerimeterOfTriangle)
```

In [6]:
```
triangle()
```

```
Height:32
Breadth:34
Area formula: (Height*Breadth)/2
Area of Triangle: 544.0
Height1:2
Height2:4
Breadth:4
Height: 32
Breadth: 34
Height1: 2
Height2: 4
Breadth1: 4
Perimeter formula: Height1+Height2+Breadth
Perimeter formula: 10
```

In [ ]: