# Answer 1

|  |
| --- |
| percentage = float(input("enter percentage"))  if(percentage>90):  print("Grade A")  elif(percentage>80 and percentage<=90):  print("Grade B")  elif(percentage>=60 and percentage<=80):  print("Grade C")  else:  print("Grade D") |

# Answer 2

|  |
| --- |
| bikePrice = float(input("enter Bike Price"))  if(bikePrice>100000):  tax = bikePrice\*.15  print(f"Road Tax is {tax}")  elif(bikePrice>50000 and bikePrice<=100000):  tax = bikePrice\*.1  print(f"Road Tax is {tax}")  else:  tax = bikePrice\*.05  print(f"Road Tax is {tax}") |

# Answer 3

|  |
| --- |
| city = input("enter city")  if(city.casefold()=="Delhi".casefold()):  print("Red Fort")  elif(city.casefold()=="Agra".casefold()):  print("Taj Mahal")  elif(city.casefold()=="Jaipur".casefold()):  print("Jal Mahal") |

# Answer 4

|  |
| --- |
| number = int(input("Enter Number"))  count = 0  while (number>10):  number = number/3  count=count+1  print(f"{count} times given number can be divided by 3 before it is less than or equal to 10") |

# Answer 5 Python while loop is used to run a block code until a certain condition is met. while Loop in Python programming

|  |
| --- |
| # program to display numbers from 1 to 5  # initialize the variable  i = 1  n = 5  # while loop from i = 1 to 5  while i <= n:  print(i)  i = i + 1 |

# Answer 6 **Right triangle pattern**

|  |
| --- |
| n = int(input("Enter the number of rows: "))  i = 1  while i <= n:  j = 1  while j <= i:  print("\*", end=" ")  j += 1  print("")  i += 1 |

### **Diamond pattern**

|  |
| --- |
| n = int(input("Enter the number of rows: "))  i = 1  while i <= n:  j = 1  while j <= n - i:  print(" ", end="")  j += 1  k = 1  while k <= 2 \* i - 1:  print("\*", end="")  k += 1  print("")  i += 1  i = n - 1  while i >= 1:  j = 1  while j <= n - i:  print(" ", end="")  j += 1  k = 1  while k <= 2 \* i - 1:  print("\*", end="")  k += 1  print("")  i -= 1 |

### **Pyramid pattern**

|  |
| --- |
| n = int(input("Enter the number of rows: "))  i = 1  while i <= n:  j = 1  while j <= n - i:  print(" ", end="")  j += 1  k = 1  while k <= 2 \* i - 1:  print("\*", end="")  k += 1  print("")  i += 1 |

# Answer 7

|  |
| --- |
| i = 10  while i >= 1:  print(i)  i -= 1 |

# Answer 8

|  |
| --- |
| i = 10  while i >= 1:  print(i)  i -= 1 |