

MIS: 112315139

GROUP-4

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Q1)

Code:

```
main.py > ...  
1 x=input("enter a number:")  
2 if int(x)%2==0:  
3     print("even")  
4 else:  
5     print("odd")  
6  
7
```

Output:

```
enter a number:5  
odd
```

Q2)

Code:

```
main.py > ...  
1 for i in range(2,11):  
2     print (1/i)  
3
```

Output:

```
0.5
0.3333333333333333
0.25
0.2
0.1666666666666666
0.14285714285714285
0.125
0.1111111111111111
0.1
```

Q3)

Code:

```
main.py > ...
1 i=int(input("enter a number: "))
2 while i>=0:
3     print(i)
4     i=i-1
5
6
```

Output:

```
enter a number: 4
4
3
2
1
0
```

Q4)

Code:

```
main.py > ...  
1 import datetime  
2 now=datetime.datetime.now()  
3 dt_string = now.strftime(" %c")  
4 print(dt_string)  
5
```

Output:

```
Run Ask AI 40ms on 16:39:12, 08/14 ✓  
Wed Aug 14 11:09:12 2024
```

Q5)

Code:

```
main.py > ...  
1 a=int(input("enter number 1: "))  
2 b=int(input("enter number 2: "))  
3 c=int(input("enter number 3: "))  
4 if a>b and a>c:  
5     print(a,"is the greatest number")  
6 elif b>a and b>c:  
7     print(b,"is the greatest number")  
8 else :  
9     print(c,"is the greatest number")  
10
```

Output:

```
enter number 1: 34  
enter number 2: 23  
enter number 3: 43  
43 is the greatest number
```

Q6)

Code:

```

main.py > ...
1 a=float(input("enter the temperature 1 in celsius: "))
2 b=float(input("enter the temperature 2 in fahrenheit: "))
3
4 print("the temprature in 1 fahrenheit is: ",(a*9/5)+32)
5 print("the temprature in 2 celsius is: ",(b-32)*5/9)
6

```

Output:

```

enter the temperature 1 in celsius: 34
enter the temperature 2 in fahrenheit: 98
the temprature in 1 fahrenheit is: 93.2
the temprature in 2 celsius is: 36.666666666666664

```

Q7)

Code:

```

main.py > ...
1 for num in range(1, 20):
2
3     if num > 1:
4         for i in range(2, num):
5             if (num % i) == 0:
6                 break
7         else:
8             print(num)
9

```

Output:

```

Run Ask AI 29ms on 15:57:47, 08/14 ✓
2
3
5
7
11
13
17
19

```

Q8)

Code:

```

main.py > ...
1  a=int(input("enter the length of the side 1 of the triangle:"))
2  b=int(input("enter the length of the side 2 of the triangle:"))
3  c=int(input("enter the length of the side 3 of the triangle:"))
4  if a*a==b*b+c*c or b*b==a*a+c*c or c*c==a*a+b*b:
5      print("it is a right angled triangle")
6
7

```

Output:

```

enter the length of the side 1 of the triangle:6
enter the length of the side 2 of the triangle:8
enter the length of the side 3 of the triangle:10
it is a right angled triangle

```

Q9)

Code:

```

main.py > ...
1  a=int(input("enter the marks of test 1:"))
2  b=int(input("enter the marks of test 2:"))
3  c=int(input("enter the marks of test 3:"))
4  if a<b and a<c:
5      print("Average of best two test marks out of three test's marks is:",
6          (b+c)/2)
7  elif b<a and b<c:
8      print("Average of best two test marks out of three test's marks is:",
9          (a+c)/2)
10 else :
11     print("Average of best two test marks out of three test's marks is:",
12         (a+b)/2)

```

Output:

```
enter the marks of test 1:34
enter the marks of test 2:25
enter the marks of test 3:12
Average of best two test marks out of three test's marks is: 29.5
```

Q10)

Code:

```
main.py > ... Form
1
2 number = int(input("Enter a number: "))
3 num_str = str(number)
4 if num_str == num_str[::-1]:
5     print(f"{number} is a palindrome.")
6 else:
7     print(f"{number} is not a palindrome.")
8 digit_count = {}
9 for digit in num_str:
10     if digit in digit_count:
11         digit_count[digit] += 1
12     else:
13         digit_count[digit] = 1
14
15 print("Digit occurrences:")
16 for digit, count in digit_count.items():
17     print(f"{digit}: {count}")
18
19
20
```

Output:

```
Enter a number: 1234321
1234321 is a palindrome.
Digit occurrences:
1: 2
2: 2
3: 2
4: 1
```

Run

Ask AI

2s on 16:49:51, 08/14 ✓

```
Enter a number: 12345
12345 is not a palindrome.
Digit occurrences:
1: 1
2: 1
3: 1
4: 1
5: 1
```

Q11)

Code:

```
sentence = input("Enter a sentence: ")

word_count = 0
digit_count = 0
uppercase_count = 0
lowercase_count = 0

words = sentence.split()
word_count = len(words)

for char in sentence:
    if char.isdigit():
        digit_count += 1
    elif char.isupper():
        uppercase_count += 1
    elif char.islower():
        lowercase_count += 1

print(f"Number of words: {word_count}")
print(f"Number of digits: {digit_count}")
print(f"Number of uppercase letters: {uppercase_count}")
print(f"Number of lowercase letters: {lowercase_count}")
```

Output:

```
Enter a sentence: The man is in his 2nd house
Number of words: 7
Number of digits: 1
Number of uppercase letters: 1
Number of lowercase letters: 19
```