

Q1.

```
year=int(input("Enter year: "))
```

```
if year%4==0 and (year%400==0 or year%100!=0):
```

```
    print("{} is a leap year.".format(year))
```

```
else:
```

```
    print("{} is NOT a leap year.".format(year))
```

Q2.

```
string =input("Enter a word: ")
```

```
vowel_count=sum(1 for char in string if char.lower() in "aeiou")
```

```
print("{} vowels prsesnt".format(vowel_count))
```

Q3.

```
list=[]
```

```
for i in range(6):
```

```
    name=input("Enter name {}: ".format(i+1))
```

```
    list.append(name)
```

```
for name in list:
```

```
    if(name[0].lower()=='a'):
```

```
        print(name,end="\n")
```

Q4.

```
integers_string=input("Enter 10 numbers: ")
```

```
list=list(map(int,integers_string.split()))
```

```
for i in list:
```

```
    if i==0:
```

```
print("Invalid number",end="\n")
```

```
elif i%2==0:
```

```
    print(i**2,end="\n")
```

```
else:
```

```
    print(i**3,end="\n")
```

Q5.

```
def rose_cost(rose_count):
```

```
    return rose_count*10
```

```
def delivery_cost(dist):
```

```
    if dist<=5:
```

```
        return 25
```

```
    elif dist>5 and dist<=10:
```

```
        return 50
```

```
    elif dist>10:
```

```
        return 75
```

```
def main():
```

```
    rose_count = int(input("Enter the number of roses: "))
```

```
    dist = int(input("Enter the distance to deliver in km: "))
```

```
    print("Total cost: {}".format(rose_cost(rose_count)+delivery_cost(dist)))
```

```
main()
```