

```

for N in range(2, 10000):
    sum1=0
    N1=str(N)
    for c in N1:
        if int(c)%2==0:
            sum1+=int(c)
    sum2=0
    i=0
    for c in N1:
        i+=1
        if i%2==0:
            sum2+=int(c)
    if abs(sum1-sum2)==13:
        print(N)
        break

```

```

for N in range(2, 10000):
    sum1=0
    N1=str(N)
    for c in N1:
        if int(c)%2==0:
            sum1+=int(c)
    sum2=0
    i=0
    for c in N1:
        i+=1
        if i%2==0:
            sum2+=int(c)
    if abs(sum1-sum2)==9:
        print(N)
        break

```

```

for N in range(2, 10000):
    sum1=0
    N1=bin(N)[2:]
    i=0
    for c in N1:
        i+=1
        if i%2==0 and int(c)==1:
            sum1+=int(c)
    sum2=0
    for c in N1:
        i+=1
        if i%2!=0 and int(c)==0:
            sum2+=1
    if abs(sum1-sum2)==5:
        print(N)
        break

```

```
for N in range(10, 10000):  
    sum1=0  
    MIN=999  
    MAX=0  
    for c in range(len(str(N))-1):  
        d=int(str(N)[c]+str(N)[c+1])  
        MIN=min(MIN,d)  
        MAX=max(MAX,d)  
    if MIN+MAX==137:  
        print(N)  
        break
```

```
for N in range(10, 10000):  
    sum1=0  
    MIN=999  
    MAX=0  
    for c in range(len(str(N))-1):  
        d=int(str(N)[c]+str(N)[c+1])  
        MIN=min(MIN,d)  
        MAX=max(MAX,d)  
    if MAX-MIN==44:  
        print(N)  
        break
```