

## MPIN Strength Analyser

Evaluate the security strength of your MPIN based on common patterns and demographic data.

### 1. Enter your MPIN

Select MPIN Length:

☒ 4-digit

☐ 6-digit

Enter your 4-digit MPIN



Please enter an MPIN.

### 2. Enter Demographic Details (Optional)

Providing demographic details helps in a more accurate security assessment.

Please enter an MPIN.

### 2. Enter Demographic Details (Optional)

Providing demographic details helps in a more accurate security assessment.

Your Date of Birth

YYYY/MM/DD

Spouse's Date of Birth (if applicable)

YYYY/MM/DD

Wedding Anniversary (if applicable)

YYYY/MM/DD

Analyse MPIN Strength

Enter your MPIN

Spouse's Date of Birth (if applicable)

YYYY/MM/DD

Wedding Anniversary (if applicable)

YYYY/MM/DD

Analyse MPIN Strength

Strength Analysis Explained:

- **Commonly Used PINs:** Easily guessable PINs like 1234, 1111, 2020, etc.
- **Demographic-Based PINs:** Personalised but predictable patterns derived from your demographic data.
  - **Your Date of Birth:** Patterns derived from your own birth date.
  - **Spouse's Date of Birth:** Patterns derived from your spouse's birth date.
  - **Wedding Anniversary:** Patterns derived from your wedding anniversary.

# TEST CASES

Test Case 1: MPIN-1234 (4 Digit)

Strength- WEAK

Reason-[‘COMMONLY USED’]

## MPIN Strength Analyser

Evaluate the security strength of your MPIN based on common patterns and demographic data.

### 1. Enter your MPIN

Select MPIN Length:

- ☒ 4-digit
- ☐ 6-digit

Enter your 4-digit MPIN

1234

### 2. Enter Demographic Details (Optional)

Providing demographic details helps in a more accurate security assessment.

Your Date of Birth

YYYY/MM/DD

Analyse MPIN Strength

### Analysis Result: ↔

Strength: WEAK

Reasons for weakness:

[ ‘COMMONLY USED’ ]

Strength Analysis Explained:

- **Commonly Used PINs:** Easily guessable PINs like 1234, 1111, 2020, etc.
- **Demographic-Based PINs:** Personalised but predictable patterns derived from your demographic data.
  - **Your Date of Birth:** Patterns derived from your own birth date.
  - **Spouse's Date of Birth:** Patterns derived from your spouse's birth date.
  - **Wedding Anniversary:** Patterns derived from your wedding anniversary.

## Test Case 2: MPIN-8352 (4 Digit)

Strength- STRONG

# MPIN Strength Analyser

Evaluate the security strength of your MPIN based on common patterns and demographic data.

## 1. Enter your MPIN

Select MPIN Length:

☒ 4-digit

☐ 6-digit

Enter your 4-digit MPIN

8352



## 2. Enter Demographic Details (Optional)

Providing demographic details helps in a more accurate security assessment.

Your Date of Birth

YYYY/MM/DD

YYYY/MM/DD

Analyse MPIN Strength

## Analysis Result:

Strength: STRONG

Your MPIN is strong based on the provided criteria.

Strength Analysis Explained:

- **Commonly Used PINs:** Easily guessable PINs like 1234, 1111, 2020, etc.
- **Demographic-Based PINs:** Personalised but predictable patterns derived from your demographic data.
  - **Your Date of Birth:** Patterns derived from your own birth date.
  - **Spouse's Date of Birth:** Patterns derived from your spouse's birth date.
  - **Wedding Anniversary:** Patterns derived from your wedding anniversary.

## Test Case 3: MPIN-789384 (6 Digit)

Strength- STRONG

# MPIN Strength Analyser

Evaluate the security strength of your MPIN based on common patterns and demographic data.

## 1. Enter your MPIN

Select MPIN Length:

- ☐ 4-digit  
☒ 6-digit

Enter your 6-digit MPIN

789384

## 2. Enter Demographic Details (Optional)

Providing demographic details helps in a more accurate security assessment.

Your Date of Birth

YYYY/MM/DD

YYYY/MM/DD

Analyse MPIN Strength

### Analysis Result:

Strength: **STRONG**

Your MPIN is strong based on the provided criteria.

Strength Analysis Explained:

- **Commonly Used PINs:** Easily guessable PINs like 1234, 1111, 2020, etc.
- **Demographic-Based PINs:** Personalised but predictable patterns derived from your demographic data.
  - **Your Date of Birth:** Patterns derived from your own birth date.
  - **Spouse's Date of Birth:** Patterns derived from your spouse's birth date.
  - **Wedding Anniversary:** Patterns derived from your wedding anniversary.

### Test Case 4: MPIN-1111 (4 Digit)

Strength- WEAK

Reason-[‘COMMONLY USED’]

# MPIN Strength Analyser

Evaluate the security strength of your MPIN based on common patterns and demographic data.

## 1. Enter your MPIN

Select MPIN Length:

- ☒ 4-digit  
☐ 6-digit

Enter your 4-digit MPIN

1111



## 2. Enter Demographic Details (Optional)

Providing demographic details helps in a more accurate security assessment.

Your Date of Birth

YYYY/MM/DD

Analyse MPIN Strength

### Analysis Result:

Strength: WEAK

Reasons for weakness:

[ 'COMMONLY USED' ]



Strength Analysis Explained:

- **Commonly Used PINs:** Easily guessable PINs like 1234, 1111, 2020, etc.
- **Demographic-Based PINs:** Personalised but predictable patterns derived from your demographic data.
  - **Your Date of Birth:** Patterns derived from your own birth date.
  - **Spouse's Date of Birth:** Patterns derived from your spouse's birth date.
  - **Wedding Anniversary:** Patterns derived from your wedding anniversary.

Test Case 5: MPIN-777777 (6 Digit)

Strength- WEAK

Reason-[ 'COMMONLY USED' ]

# MPIN Strength Analyser

Evaluate the security strength of your MPIN based on common patterns and demographic data.

## 1. Enter your MPIN

Select MPIN Length:

☐ 4-digit

☒ 6-digit

Enter your 6-digit MPIN

777777

✖

## 2. Enter Demographic Details (Optional)

Providing demographic details helps in a more accurate security assessment.

Your Date of Birth

YYYY/MM/DD

Wedding Anniversary (if applicable)

YYYY/MM/DD

Analyse MPIN Strength

### Analysis Result:

Strength: WEAK

Reasons for weakness:

[ 'COMMONLY USED' ]

Strength Analysis Explained:

- Commonly Used PINs: Easily guessable PINs like 1234, 1111, 2020, etc.
- Demographic-Based PINs: Personalised but predictable patterns derived from your demographic data.

Test Case 6: MPIN-987645 (6 Digit)

Strength- WEAK

Reason-[‘COMMONLY USED’]

# MPIN Strength Analyser

Evaluate the security strength of your MPIN based on common patterns and demographic data.


## 1. Enter your MPIN

Select MPIN Length:

- ☐ 4-digit
- ☒ 6-digit

Enter your 6-digit MPIN

987654

Press Enter to apply  6/6

## 2. Enter Demographic Details (Optional)

Providing demographic details helps in a more accurate security assessment.

Your Date of Birth

YYYY/MM/DD

Wedding Anniversary (if applicable)

YYYY/MM/DD

Analyse MPIN Strength

### Analysis Result:

Strength: WEAK

Reasons for weakness:

[ 'COMMONLY USED' ]

Strength Analysis Explained:

- Commonly Used PINs:** Easily guessable PINs like 1234, 1111, 2020, etc.
- Demographic-Based PINs:** Personalised but predictable patterns derived from your demographic data.

### Test Case 7: MPIN-1212 (4 Digit)

Strength- WEAK

Reason-[‘COMMONLY USED’]



# MPIN Strength Analyser

Evaluate the security strength of your MPIN based on common patterns and demographic data.

## 1. Enter your MPIN

Select MPIN Length:

- ☒ 4-digit  
☐ 6-digit

Enter your 4-digit MPIN

1212

## 2. Enter Demographic Details (Optional)

Providing demographic details helps in a more accurate security assessment.

Your Date of Birth

YYYY/MM/DD

Your Date of Birth

YYYY/MM/DD

Spouse's Date of Birth (if applicable)

YYYY/MM/DD

Wedding Anniversary (if applicable)

YYYY/MM/DD

Analyse MPIN Strength

### Analysis Result:

Strength: WEAK

Reasons for weakness:

[ 'COMMONLY USED' ]

Test Case 8: MPIN-123321 (6 Digit)

Strength- WEAK

Reason-[‘COMMONLY USED’]

# MPIN Strength Analyser

Evaluate the security strength of your MPIN based on common patterns and demographic data.

## 1. Enter your MPIN

Select MPIN Length:

- ☐ 4-digit  
☒ 6-digit

Enter your 6-digit MPIN

123321



## 2. Enter Demographic Details (Optional)

Providing demographic details helps in a more accurate security assessment.

Your Date of Birth

YYYY/MM/DD

Your Date of Birth

YYYY/MM/DD

Spouse's Date of Birth (if applicable)

YYYY/MM/DD

Wedding Anniversary (if applicable)

YYYY/MM/DD

Analyse MPIN Strength

### Analysis Result:

Strength: WEAK

Reasons for weakness:

[ 'COMMONLY USED' ]

Test Case 9: MPIN-0718 (4 Digit)

Self DOB- 1995/07/18

Strength- WEAK

Reason-[‘DEMOGRAPHIC DOB SELF’]

# MPIN Strength Analyser

Evaluate the security strength of your MPIN based on common patterns and demographic data.


## 1. Enter your MPIN

Select MPIN Length:

- ☒ 4-digit  
☐ 6-digit

Enter your 4-digit MPIN

0718


Press Enter to apply  4/4

## 2. Enter Demographic Details (Optional)

Providing demographic details helps in a more accurate security assessment.

Your Date of Birth

1995/07/18



Spouse's Date of Birth (if applicable)

YYYY/MM/DD

Wedding Anniversary (if applicable)

YYYY/MM/DD

Analyse MPIN Strength

### Analysis Result:

Strength: WEAK

Reasons for weakness:

[ 'DEMOGRAPHIC DOB SELF' ]

Test Case 10: MPIN-8503 (4 Digit)

Strength- WEAK

Self DOB- 1985/03/03

Reason-[ 'DEMOGRAPHIC DOB SELF' ]

# MPIN Strength Analyser

Evaluate the security strength of your MPIN based on common patterns and demographic data.

## 1. Enter your MPIN

Select MPIN Length:

- ☒ 4-digit  
☐ 6-digit

Enter your 4-digit MPIN

8503


Press Enter to apply  4/4

## 2. Enter Demographic Details (Optional)

Providing demographic details helps in a more accurate security assessment.


Your Date of Birth

1985/03/03



Your Date of Birth

1985/03/03



Spouse's Date of Birth (if applicable)

YYYY/MM/DD

Wedding Anniversary (if applicable)

YYYY/MM/DD

Analyse MPIN Strength

### Analysis Result:

Strength: WEAK

Reasons for weakness:

[ 'DEMOGRAPHIC DOB SELF' ]

Test Case 11: MPIN-2209 (4 Digit)

Strength- WEAK

Self DOB- 1985/03/03

Spouse DOB- 1992/09/22

Reason-[ 'DEMOGRAPHIC DOB SPOUSE' ]

# MPIN Strength Analyser

Evaluate the security strength of your MPIN based on common patterns and demographic data.

## 1. Enter your MPIN

Select MPIN Length:

- ☒ 4-digit
- ☐ 6-digit

Enter your 4-digit MPIN

2209

✖

## 2. Enter Demographic Details (Optional)

Providing demographic details helps in a more accurate security assessment.

Your Date of Birth

1985/03/03

✖

Providing demographic details helps in a more accurate security assessment.

Your Date of Birth

1985/03/03

✖

Spouse's Date of Birth (if applicable)

1992/09/22

✖

Wedding Anniversary (if applicable)

YYYY/MM/DD

Analyse MPIN Strength

### Analysis Result: ⇄

Strength: WEAK

Reasons for weakness:

[ 'DEMOGRAPHIC DOB SPOUSE' ]

Test Case 12: MPIN-042005 (6 Digit)

Self DOB- 1982/12/12

Spouse DOB- 1981/02/22

Wedding Anniversary- 2005/04/20

Strength- WEAK

Reason-[‘DEMOGRAPHIC ANNIVERSARY’]

# MPIN Strength Analyser

Evaluate the security strength of your MPIN based on common patterns and demographic data.

## 1. Enter your MPIN

Select MPIN Length:

- ☐ 4-digit
- ☒ 6-digit

Enter your 6-digit MPIN

042005

🗑

## 2. Enter Demographic Details (Optional)

Providing demographic details helps in a more accurate security assessment.

Your Date of Birth

1982/12/12

✕

Your Date of Birth

1982/12/12

✕

Spouse's Date of Birth (if applicable)

1981/02/22

✕

Wedding Anniversary (if applicable)

2005/04/20

✕

Analyse MPIN Strength

### Analysis Result: ⇄

Strength: WEAK

Reasons for weakness:

[ 'DEMOGRAPHIC ANNIVERSARY' ]

Test Case 13: MPIN-202007 (6 Digit)

Self DOB- 1982/12/12

Spouse DOB- 1999/02/22

Wedding Anniversary- 2020/10/07

Strength- WEAK

Reason-[ 'DEMOGRAPHIC ANNIVERSARY' ]

# MPIN Strength Analyser

Evaluate the security strength of your MPIN based on common patterns and demographic data.

## 1. Enter your MPIN

Select MPIN Length:

☐ 4-digit

☒ 6-digit

Enter your 6-digit MPIN

202007

## 2. Enter Demographic Details (Optional)

Providing demographic details helps in a more accurate security assessment.

Your Date of Birth

1982/12/12

Providing demographic details helps in a more accurate security assessment.

Your Date of Birth

1982/12/12

Spouse's Date of Birth (if applicable)

1999/02/22

Wedding Anniversary (if applicable)

2020/10/07

Analyse MPIN Strength

## Analysis Result:

Strength: WEAK

Reasons for weakness:

[ 'DEMOGRAPHIC ANNIVERSARY' ]

Test Case 14: MPIN-2373 (4 Digit)

Strength- STRONG

# MPIN Strength Analyser

Evaluate the security strength of your MPIN based on common patterns and demographic data.

## 1. Enter your MPIN

Select MPIN Length:

- ☒ 4-digit  
☐ 6-digit

Enter your 4-digit MPIN

2373



## 2. Enter Demographic Details (Optional)

Providing demographic details helps in a more accurate security assessment.

Your Date of Birth

2004/05/17



YYYY/MM/DD

Analyse MPIN Strength

### Analysis Result:

Strength: **STRONG**

Your MPIN is strong based on the provided criteria.

Strength Analysis Explained:

- **Commonly Used PINs:** Easily guessable PINs like 1234, 1111, 2020, etc., including patterns found on a phone keypad (e.g., 2580, 1470).
- **Demographic-Based PINs:** Personalised but predictable patterns derived from your demographic data:
  - **Your Date of Birth:** Patterns derived from your own birth date.
  - **Spouse's Date of Birth:** Patterns derived from your spouse's birth date.
  - **Wedding Anniversary:** Patterns derived from your wedding anniversary.

Test Case 15: MPIN- 2004 (4 Digit)

Strength- WEAK

Self DOB- 2004/05/17

Reason-[‘COMMONLY USED’, ‘DEMOGRAPHIC DOB SELF’]



# MPIN Strength Analyser

Evaluate the security strength of your MPIN based on common patterns and demographic data.

## 1. Enter your MPIN

Select MPIN Length:

- ☒ 4-digit
- ☐ 6-digit

Enter your 4-digit MPIN

2004

## 2. Enter Demographic Details (Optional)

Providing demographic details helps in a more accurate security assessment.

Your Date of Birth

2004/05/17

2004/05/17

Spouse's Date of Birth (if applicable)

YYYY/MM/DD

Wedding Anniversary (if applicable)

YYYY/MM/DD

Analyse MPIN Strength

### Analysis Result:

Strength: WEAK

Reasons for weakness:

[ 'COMMONLY USED', 'DEMOGRAPHIC DOB SELF' ]

Test Case 16: MPIN- EMPTY (4 Digit)

WARNING- Please enter a MPIN to analyse.

# MPIN Strength Analyser

Evaluate the security strength of your MPIN based on common patterns and demographic data.

## 1. Enter your MPIN

Select MPIN Length:

- ☒ 4-digit  
☐ 6-digit

Enter your 4-digit MPIN

Please enter an MPIN.

## 2. Enter Demographic Details (Optional)

Providing demographic details helps in a more accurate security assessment.

Your Date of Birth

Please enter an MPIN.

## 2. Enter Demographic Details (Optional)

Providing demographic details helps in a more accurate security assessment.

Your Date of Birth

YYYY/MM/DD

Spouse's Date of Birth (if applicable)

YYYY/MM/DD

Wedding Anniversary (if applicable)

YYYY/MM/DD

Analyse MPIN Strength

Please enter an MPIN to analyse.

Test Case 17: MPIN- EMPTY (6 Digit)

WARNING- Please enter a MPIN to analyse.

# MPIN Strength Analyser

Evaluate the security strength of your MPIN based on common patterns and demographic data.

## 1. Enter your MPIN

Select MPIN Length:

- ☐ 4-digit  
☒ 6-digit

Enter your 6-digit MPIN

Please enter an MPIN.

## 2. Enter Demographic Details (Optional)

Providing demographic details helps in a more accurate security assessment.

Please enter an MPIN.

## 2. Enter Demographic Details (Optional)

Providing demographic details helps in a more accurate security assessment.

Your Date of Birth

Spouse's Date of Birth (if applicable)

Wedding Anniversary (if applicable)

Analyse MPIN Strength

Please enter an MPIN to analyse.

Test Case 18: MPIN- 2004 (4 Digit)

Strength- WEAK

Self DOB- 2004/05/17

Spouse DOB- 2004/08/01

Reason-[‘COMMONLY USED’, ‘DEMOGRAPHIC DOB SELF’,  
‘DEMOGRAPHIC DOB SPOUSE’]

# MPIN Strength Analyser

Evaluate the security strength of your MPIN based on common patterns and demographic data.

## 1. Enter your MPIN

Select MPIN Length:

- ☒ 4-digit  
☐ 6-digit

Enter your 4-digit MPIN

2004



## 2. Enter Demographic Details (Optional) ⇄

Providing demographic details helps in a more accurate security assessment.

Your Date of Birth

2004/05/17



Your Date of Birth

2004/05/17



Spouse's Date of Birth (if applicable)

2004/08/01



Wedding Anniversary (if applicable)

YYYY/MM/DD

Analyse MPIN Strength

### Analysis Result: ⇄

Strength: WEAK

Reasons for weakness:

['COMMONLY USED', 'DEMOGRAPHIC DOB SELF', 'DEMOGRAPHIC DOB SPOUSE']

Test Case 19: MPIN- 12A3 (4 Digit)

WARNING- MPIN must contain only digits.

# MPIN Strength Analyser

Evaluate the security strength of your MPIN based on common patterns and demographic data.

## 1. Enter your MPIN

Select MPIN Length:

- ☒ 4-digit  
☐ 6-digit

Enter your 4-digit MPIN

12A3



MPIN must contain only digits.

## 2. Enter Demographic Details (Optional)

Providing demographic details helps in a more accurate security assessment.

Test Case 20: MPIN- AB1234 (6 Digit)

WARNING- MPIN must contain only digits.

# MPIN Strength Analyser

Evaluate the security strength of your MPIN based on common patterns and demographic data.

## 1. Enter your MPIN

Select MPIN Length:

- ☐ 4-digit  
☒ 6-digit

Enter your 6-digit MPIN

AB1234



MPIN must contain only digits.

## 2. Enter Demographic Details (Optional)

Providing demographic details helps in a more accurate security assessment.

## run\_analysis.py

```
--- MPIN Strength Analysis Results ---
```

```
Test Case 1: Commonly Used: 1234 (sequential)
MPIN: 1234
Strength: WEAK
Reasons: COMMONLY_USED
```

```
Test Case 2: Commonly Used: 1111 (all same digits)
MPIN: 1111
Strength: WEAK
Reasons: COMMONLY_USED
```

```
Test Case 3: Commonly Used: 4321 (reverse sequential)
MPIN: 4321
Strength: WEAK
Reasons: COMMONLY_USED
```

```
Test Case 4: Commonly Used: 1212 (repeating pair)
MPIN: 1212
Strength: WEAK
Reasons: COMMONLY_USED
```

```
Test Case 5: Commonly Used: 1221 (palindromic)
MPIN: 1221
Strength: WEAK
Reasons: COMMONLY_USED
```

```
Test Case 6: Commonly Used: 1122 (consecutive repeating pairs)
MPIN: 1122
Strength: WEAK
Reasons: COMMONLY_USED
```

```
Test Case 7: DOB Self: 0102 (MMDD)
MPIN: 0102
Demographics: {'dob_self': '1998-01-02'}
Strength: WEAK
Reasons: DEMOGRAPHIC_DOB_SELF
```

```
Test Case 8: DOB Self: 0201 (DDMM)
MPIN: 0201
Demographics: {'dob_self': '1998-01-02'}
Strength: WEAK
Reasons: DEMOGRAPHIC_DOB_SELF
```

```
Test Case 9: DOB Self: 9801 (YYMM)
MPIN: 9801
Demographics: {'dob_self': '1998-01-02'}
Strength: WEAK
Reasons: DEMOGRAPHIC_DOB_SELF
```

```
Test Case 10: DOB Spouse: 1215 (MMDD)
MPIN: 1215
Demographics: {'dob_spouse': '1997-12-15'}
Strength: WEAK
Reasons: DEMOGRAPHIC_DOB_SPOUSE
```

```
Test Case 11: Anniversary: 0304 (MMDD)
MPIN: 0304
Demographics: {'anniversary': '2022-03-04'}
Strength: WEAK
Reasons: DEMOGRAPHIC_ANNIVERSARY
```

```
Test Case 12: Child DOB: 0520 (MMDD)
MPIN: 0520
Demographics: {'child_dob': '2010-05-20'}
Strength: STRONG
```

```
Test Case 13: Pet DOB: 1101 (MMDD)
MPIN: 1101
Demographics: {'pet_dob': '2015-11-01'}
Strength: STRONG
Reasons: None
```

```
Test Case 14: Strong: 3841
MPIN: 3841
Strength: STRONG
Reasons: None
```

```
Test Case 15: Combined Weakness: DOB Self & Anniversary
MPIN: 0102
Demographics: {'dob_self': '1998-01-02', 'anniversary': '2022-03-04'}
Strength: WEAK
Reasons: DEMOGRAPHIC_DOB_SELF
```

```
Test Case 16: Commonly Used: 123456 (sequential)
MPIN: 123456
Strength: WEAK
Reasons: COMMONLY_USED
```

```
Test Case 17: Commonly Used: 111111 (all same digits)
MPIN: 111111
Strength: WEAK
Reasons: COMMONLY_USED
```

```
Test Case 18: DOB Self: 010298 (MMDDYY)
MPIN: 010298
Demographics: {'dob_self': '1998-01-02'}
Strength: WEAK
Reasons: DEMOGRAPHIC_DOB_SELF
```

```
Test Case 19: DOB Spouse: 151297 (DDMMYY)
MPIN: 151297
Demographics: {'dob_spouse': '1997-12-15'}
Strength: WEAK
Reasons: DEMOGRAPHIC_DOB_SPOUSE
```

```
Test Case 20: Anniversary: 202203 (YYYYMM)
MPIN: 202203
Demographics: {'anniversary': '2022-03-04'}
Strength: WEAK
```

```
Test Case 21: Strong: 940281
MPIN: 940281
Strength: STRONG
Reasons: None
```

```
Test Case 22: Partial match: 0298 (DDYY from DOB Self MMDDYY)
MPIN: 0298
Demographics: {'dob_self': '1998-01-02'}
Strength: WEAK
Reasons: DEMOGRAPHIC_DOB_SELF
```

```
Test Case 23: Partial match: 9801 (YYMM from DOB Self YYYYMM)
MPIN: 9801
Demographics: {'dob_self': '1998-01-02'}
Strength: WEAK
Reasons: DEMOGRAPHIC_DOB_SELF
```

```
Test Case 24: Strong: 7263
MPIN: 7263
Strength: STRONG
Reasons: None
```