

1.INTERCHANGE THE VALUES B/W A AND B.

```
REPORT    ZINTERCHANGE.
PARAMETERS : A TYPE I , B TYPE I.
NEW-LINE.
WRITE 'BEFORE CHANGE'.
WRITE : A , B.
A = A + B .
B = A - B.
A = A - B.
NEW-LINE.
WRITE 'AFTER CHANGE'.
WRITE : A , B.
```

2. REVERSE A NUMBERS

```
REPORT    ZNUM_REVERSE.
PARAMETERS : N TYPE I .
DATA : REM TYPE I , TOTAL TYPE I .
WHILE N GT 0 .
    REM = N MOD 10 .
    TOTAL = TOTAL * 10 + REM .
    N = N / 10 .
ENDWHILE.
WRITE TOTAL.
```

3. SUM OF DIGITS

```
REPORT    ZSUMOFDIGITS.
PARAMETERS : N TYPE I .
DATA : REM TYPE I , TOTAL TYPE I VALUE 0 .
WHILE N GT 0 .
    REM = N MOD 10 .
    TOTAL = TOTAL + REM .
    N = N / 10 .
ENDWHILE.
WRITE / TOTAL .
```

4. FIBONOCCHI SERIES.

```
REPORT    ZFIBO.
DATA : A TYPE I VALUE 0,B TYPE I VALUE 1,C TYPE I.
PARAMETERS : N TYPE I.
N = N - 2.
WRITE : A , B.
WHILE SY-INDEX LE N.
    C = A + B .
    WRITE : C.
    A = B. B = C.
ENDWHILE.
```

5. Nth FIBONOCCHI NUMBER.

```
REPORT    ZNTH_FIBO.

DATA : A TYPE I VALUE 0,
      B TYPE I VALUE 1,
      C TYPE I.
PARAMETERS : N TYPE I.
DATA : NTH TYPE I .
NTH = N - 2.

WHILE SY-INDEX LT N.
  C = A + B .
  A = B .
  B = C .
  IF SY-INDEX EQ NTH.
WRITE : N NO-GAP , 'th FIBONOCCHI NUM IS ' , C.
  ENDIF.
ENDWHILE.
```

6. FACTORIAL

```
REPORT    ZFACTORIAL.
PARAMETERS : N TYPE I.
DATA : COUNT TYPE I VALUE 1,
      FACT TYPE I VALUE 1.
  WHILE COUNT LE N.
    FACT = FACT * COUNT.
    COUNT = COUNT + 1 .
  ENDWHILE.

WRITE : 'THE FACTORIAL OF', N NO-GAP, 'IS', FACT.
```

7. PRIME NUMBER.

```
REPORT    ZPRIME.

PARAMETERS : N TYPE I.
DATA : I TYPE I VALUE 1,
      COUNT TYPE I VALUE 0, TEMP TYPE I.

WHILE I LE N .
  TEMP = N MOD I .
  IF TEMP EQ 0.
    COUNT = COUNT + 1.
  ENDIF.
  I = I + 1.
ENDWHILE.
```

```
IF COUNT EQ 2.  
  WRITE : / N , 'IS PRIME NUMBER'.  
ELSE.  
  WRITE : / N , 'IS NOT PRIME NUMBER'.  
ENDIF.
```