```
#Ex1NPL
import re
def detect word pattern(pattern, text):
       matches = re.findall(pattern, text)
       if matches:
              print("Word patterns detected:")
              for match in matches:
                      print(match)
       else:
              print("No word patterns detected.")
# sample inputs and outputs
sample inputs = [
       ("[0-9]+","The price is $25 and the quantity is 10."),
       ("[A-Z][a-z]+", "John and Alice went to the park."),
       ("[aeiou]+","The quick brown for jumps over the lazy dog."),
       ("[0-9]{2}-[0-9]{2}-[0-9]{4}", "The date is 12-31-2022."),
       ("[A-Za-z]+","12345 is a number.")
1
for pattern, text in sample inputs:
       print("patterns:",pattern)
       print("Text:",text)
       detect_word_pattern(pattern, text)
       print("-----")
```

Output:

```
Activities Terminal Jul 20 15:11

administrator@ab1-cse125:- Spython3 exinlp.py
administrator@ab1-cse125:- Spython3 exinlp.py
patterns: [0-9]+
Text: The price is $25 and the quantity is 10.
Word patterns detected.

patterns: [A-2][a-2]+
Text: John and Alice went to the park.
Word patterns detected:

Alice
No word patterns detected.

Patterns: [aelou]+
Text: The quick brown for jumps over the lazy dog.
Word patterns detected:

ui

o

n

patterns: [0-9]{2}-[0-9](2)-[0-9](4)
Text: Tred quick brown for jumps over the lazy dog.
Word patterns detected:

patterns: [0-9]{2}-[0-9](4)
Text: The duick brown for jumps over the lazy dog.
Word patterns detected.

Patterns: [0-9]{2}-[0-9](4)
Text: The duick frown for jumps over the lazy dog.
Word patterns detected.

Patterns: [0-9]{2}-[0-9](4)
Text: The date is 12-31-2022.
Word patterns detected.

Patterns: [0-9]{2}-[0-9](4)
Text: The date is 12-31-2022.
Word patterns detected.

Patterns: [A-Za-z]+
```