

1) Write a Python function to check whether a string is a pangram or not.

Note : Pangrams are words or sentences containing every letter of the alphabet at least once.

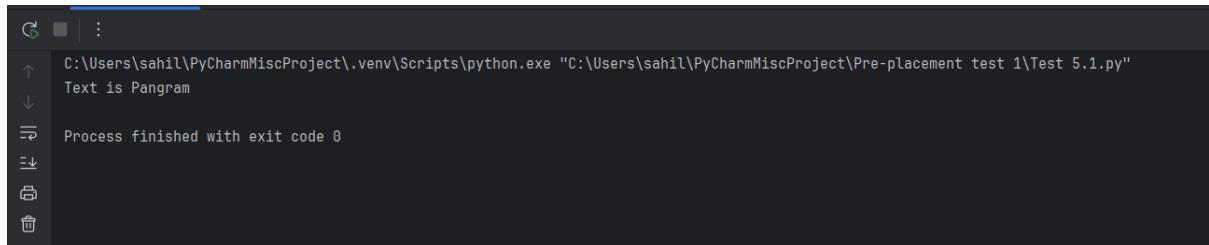
For example : "The quick brown fox jumps over the lazy dog"

ANS:

```
def pangram(text):
    text = text.lower()
    for i in range(ord('a'), ord('z') + 1):
        if chr(i) not in text:
            return False
    return True
```

```
text = "The quick brown fox jumps over the lazy dog"
```

```
if pangram(text):
    print("Text is Pangram")
else:
    print("Text is NOT Pangram")
```



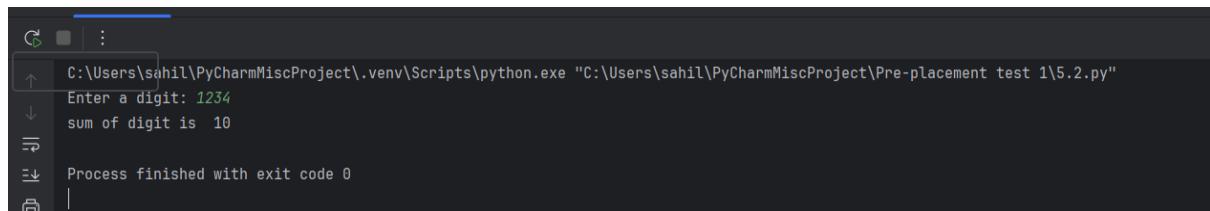
The screenshot shows the PyCharm terminal window. The command run was `C:\Users\sahil\PyCharmMiscProject\.venv\Scripts\python.exe "C:\Users\sahil\PyCharmMiscProject\Pre-placement test 1\Test 5.1.py"`. The output displayed is "Text is Pangram". At the bottom, it shows "Process finished with exit code 0".

Q.2) Write a Python program to calculate the sum of the digits in an integer.

ANS:

```
digit=int(input("Enter a digit: "))
digits=len(str(digit))
sum=0

for i in range(1,(digits+1)):
    s=digit%10
    sum+=s
    digit=digit//10
print("sum of digit is ",sum)
```



The screenshot shows the PyCharm terminal window. The command entered is `C:\Users\sahil\PyCharmMiscProject\.venv\Scripts\python.exe "C:\Users\sahil\PyCharmMiscProject\Pre-placement test 1\5.2.py"`. The terminal then prompts for input with `Enter a digit:` . The user enters `1234`. The program calculates the sum of the digits and prints `sum of digit is 10`. Finally, it displays `Process finished with exit code 0`.

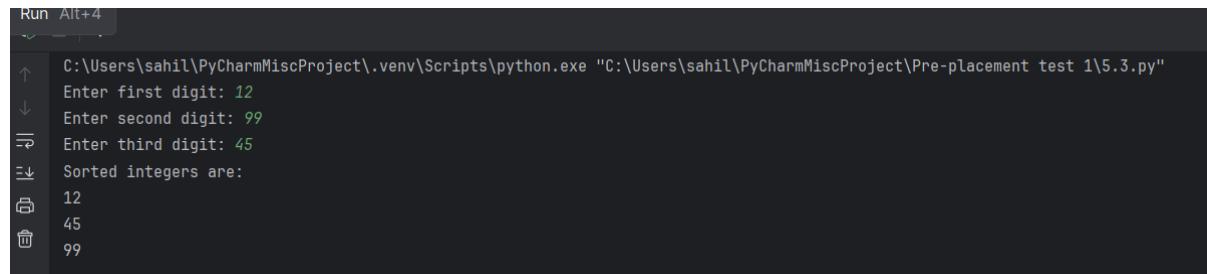
Q.3) Write a Python program to sort three integers without using conditional statements and

loops. [ u can use built in functions for this ]

ANS:

```
a=int(input("Enter first digit: "))
b=int(input("Enter second digit: "))
c=int(input("Enter third digit: "))
```

```
l=[a,b,c]
l.sort()
print(l)
```



The screenshot shows the PyCharm IDE's run output terminal. The terminal window title is "Run Alt+4". The command entered is "C:\Users\sahil\PyCharmMiscProject\.venv\Scripts\python.exe "C:\Users\sahil\PyCharmMiscProject\Pre-placement test 1\5.3.py"".

The terminal output is as follows:

```
↑ Enter first digit: 12
↓ Enter second digit: 99
→ Enter third digit: 45
≡ Sorted integers are:
Copies 12
Delete 45
Delete 99
```

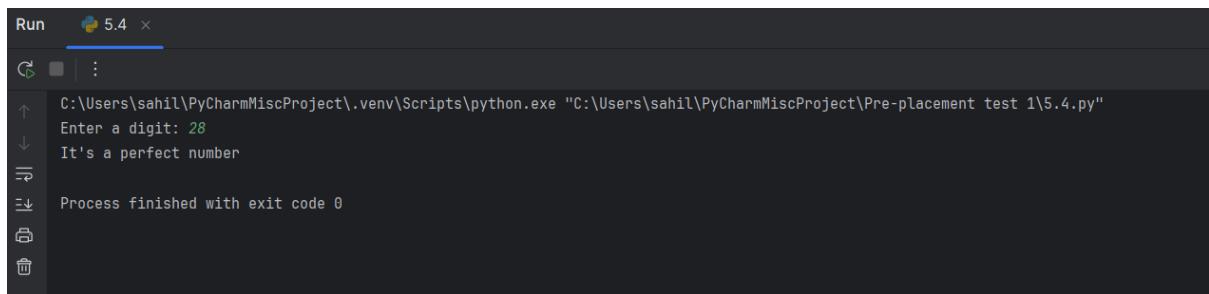
Q.4) Write a Python function to check whether a number is perfect or not.

ANS:

```
digit=int(input("Enter a digit: "))
l=[]
for i in range(1,digit):
    if digit %i ==0:
        l.append(i)

a=sum(l)

if a==digit:
    print("It's a perfect number")
else:
    print("It's not a perfect number")
```



The screenshot shows the PyCharm interface with the 'Run' tab selected. The title bar says 'Run 5.4'. The run configuration dropdown shows '5.4'. The terminal window displays the command: 'C:\Users\sahil\PyCharmMiscProject\.venv\Scripts\python.exe "C:\Users\sahil\PyCharmMiscProject\Pre-placement test 1\5.4.py"'. The user enters '28' at the prompt 'Enter a digit:'. The output shows 'It's a perfect number'. Finally, it says 'Process finished with exit code 0'.