

SET -1
Midterm 3rd semester
Python Program for Insertion Sort

```
def insertion_sort(alist):
    for i in range(1, len(alist)):
        temp = alist[i]
        j = i - 1
        while (j >= 0 and temp < alist[j]):
            alist[j + 1] = alist[j]
            j = j - 1
        alist[j + 1] = temp

alist = input('Enter the list of numbers: ').split()
alist = [int(x) for x in alist]
insertion_sort(alist)
print('Sorted list: ', end='')print(alist)
```

Program to print the pattern 'G'

Python program to print pattern G

```
def Pattern(line):
    pat=""
    for i in range(0, line):
        for j in range(0, line):
            if ((j == 1 and i != 0 and i != line-1) or ((i == 0 or
                i == line-1) and j > 1 and j < line-2) or (i == ((line-1)/2)
                and j > line-5 and j < line-1) or (j == line-2 and
                i != 0 and i != line-1 and i >=((line-1)/2))):
                pat=pat+"*"
            else:
                pat=pat+" "
        pat=pat+"\n"
    return pat

# Driver Code
line = 7
print(Pattern(line))
```

Which type of Programming does Python support?

- a) object-oriented programming
- b) structured programming
- c) functional programming
- d) all of the mentioned

Ans: d

All keywords in Python are in

Answer: b) lower case

Which of the following functions can help us to find the version of Python that we are currently working on?

Answer: c) `sys.version()`

What is the order of precedence in Python?

Answer: d) Parentheses, Exponential, Multiplication, Division, Addition, Subtraction

What does pip stand for in Python?

Answer: c) Preferred Installer Program

Which of the following is true for variable names in Python?

Answer: b) Unlimited length

Which of these is the definition for packages in Python?

Answer: b) A folder of Python modules

What is the use of functions in Python?

Answer: c) Functions are reusable pieces of programs

What will be the output of the following Python code snippet?

```
python
Copy code
z = set('abc$de')
'a' in z
```

Answer: b) True

What will be the output of the following Python expression?

```
python
Copy code
round(4.576)
```

Answer: a) 5

What is the output of `print(math.pow(3, 2))`?

Answer: a) 9.0