

1

ඇල්ගොරිදම සංවර්ධනය සහ පයිතන් ක්‍රමලේඛනය

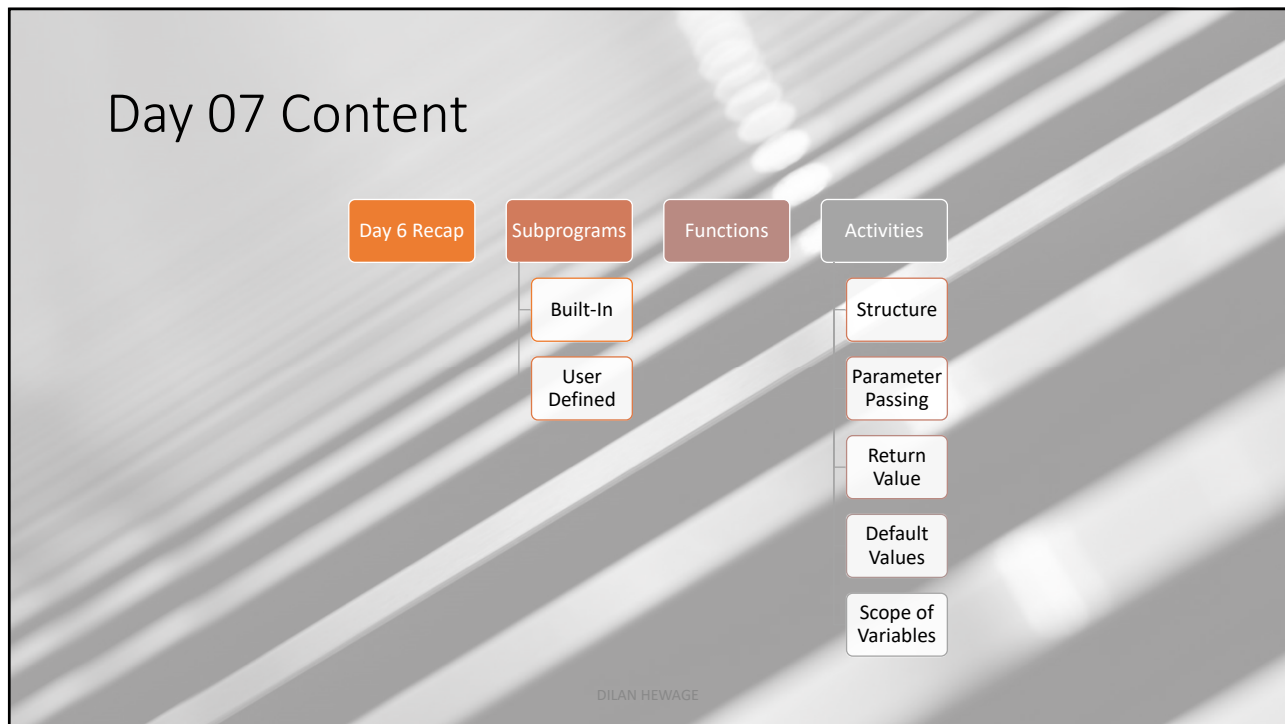
Algorithm Development & Python Programming

Workshop Day - 7

DILAN HEWAGE

BIT – University of Colombo / CIDM – APIDM
Founder of WiTeds Solutions
Co-Founder of Print Arcade

2



3

Day 6 Recap

6 දින සාරාංශය

DILAN HEWAGE

4

Subprograms

DILAN HEWAGE

5

Subprograms

- A function is a group of statements that exist within a program for the purpose of performing a specific task. Instead of writing a large program as one long sequence of statements, it can be written as several small functions, each one performing a specific part of the task.
- A function is a reusable portion of a program, sometimes called a procedure or subroutine.
- Like a mini-program (or subprogram) in its own right
- Can take in special inputs (arguments)
- Can produce an answer value (return value)
- Similar to the idea of a function in mathematics

```
#!/usr/bin/python
# Function definition is here
def printme( str ):
    "This prints a passed string into this function"
    print str
    return;

# Now you can call printme function
printme("I'm first call to user defined function!")
printme("Again second call to the same function")
```

Dilan Hewage

6

Built-in Functions

- Python has several functions that are readily available for use. These functions are called built-in functions.
- The Python built-in functions are defined as the functions whose functionality is pre-defined in Python.
- The python interpreter has several functions that are always present for use. These functions are known as Built-in Functions

Built-In Functions				
abs()	dict()	help()	min()	setattr()
all()	dir()	hex()	next()	slice()
any()	divmod()	id()	object()	sorted()
ascii()	enumerate()	input()	oct()	staticmethod()
bin()	eval()	int()	open()	str()
bool()	exec()	isinstance()	ord()	sum()
bytearray()	filter()	issubclass()	pow()	super()
bytes()	float()	iter()	print()	tuple()
callable()	format()	len()	property()	type()
chr()	frozenset()	list()	range()	vars()
classmethod()	getattr()	locals()	repr()	zip()
compile()	globals()	map()	reversed()	__import__()
complex()	hasattr()	max()	round()	
delattr()	hash()	memoryview()	set()	

Dilan Hewage

7

User-defined

- In all programming and scripting language, a function is a block of program statements which can be used repetitively in a program.
- It saves the time of a developer. In Python concept of function is same as in other languages.
- In Python, a user-defined function's declaration begins with the keyword def and followed by the function name.
- The function may take arguments(s) as input within the opening and closing parentheses, just after the function name followed by a colon.
- After defining the function name and arguments(s) a block of program statement(s) start at the next line and these statement(s) must be indented.

```

def add_numbers(num1, num2):
    num1 + num2
    return num1 + num2

add_numbers(4, 5)

```

Dilan Hewage

8

End of the Day 7

Have you learned something?
See you all again on day 8