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QUESTION NO 1 : What type of error do occur in python , write the program with different types of error as well as write separate correction code?

Following are the major errors that occur in Python.

- I. Syntax Error
- II. Name Error
- III. Type Error

Syntax Error:

Syntax error is caused by violating the rules of Python

Example:

```
In[ ]: print (cricket team)
```

```
Print (cricket team)
```

Syntax error: invalid syntax

Name Error:

Name error is thrown when an object is not found.

Example:

```
Print ("cricket team")
```

Name Error: name, 'Print' is not defined.

Print is the name of function so all the character must be in lower case

```
In[ ]: print (student-number)
```

Name Error: name, 'student number' is not defined.

Type Error:

Type error is thrown when an operation or function is applied to an object of an inappropriate type.

Example:

```
In[ ]: Print ("computer programming" * 1010)
```

Type Error: must be str, not int.

QUESTION NO:2

What are Boolean string test, write the code for each Boolean string test code?

Boolean string test returns true or false.

Methods:

- i. `.isalpha()`
- ii. `.isalnum()`
- iii. `.istitle()`
- iv. `.islower()`
- v. `.isupper()`
- vi. `.startswith()`

Isalpha():

```
In[ ] : "Hello" . isalpha()
```

```
Out[ ] : True
```

```
In[ ] : "Hello1" . isalpha()
```

```
Out[ ] : False
```

Isalnum():

```
In[ ] : "Hello5" . isalnum()
```

```
Out[ ] : True
```

```
In[ ] : "Hello" . isalnum()
```

```
Out[ ] : True
```

Istitle():

```
In[ ] : "Harry Potter" . istitle()
```

```
Out[ ] : True
```

```
In[ ] : "Harry potter" . istitle()
```

```
Out[ ] : False
```

Islower():

```
In[ ] : "harry potter" . islower()
```

Out[] : True

In[] : “ Harry Potter” . islower()

Out[] : False

Isupper():

In[] : “ HARRY” . isupper()

Out[] : True

In[] : “ harry” . isupper()

Out[] : False

Startswith():

In[] : “ Harry”, startswith(“H”)

Out[] : True

QUESTION NO 3: What is formatting sting input mean in python,write a program in which formatting string input is used?

Answer: formatting string input means to set input with some string.

Example:

In[] : fav-game = input(“what is your favorite game”)

Print(fav-game);

What is your favorite game? cricket

Out[] : cricket

Formatting the string:

```
In[ ] : fav-game = input("what is your favorite game").lower()
```

```
Print(fav-game);
```

```
What is your favorite game? cricket
```

```
Out[ ] : cricket
```

```
In[ ] : fav-game = input("what is your favorite game").upper()
```

```
Print(fav-game);
```

```
What is your favorite game? CRICKET
```

```
Out[ ] : CRICKET
```

```
In[ ] : fav-game = input("what is your favorite game").capitalized()
```

```
Print(fav-game);
```

```
What is your favorite game? Cricket
```

```
Out[ ] : Cricket
```