

Name:

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Roll No:

L1F22BSCSO277

SECTION:

G-05

SUBJECT

Compiler Construction

ASSIGNMENT

NO 1

INCOMPLETE

## 1) Language Overview:-

- Language name : Al-Noor ( النور )
- Theme : Arabic language culture . The keywords are derived from clear and basic arabic (Roman Arabic)
- Purpose : A simple , strongly typed scripting language for basic programming tasks .  
Feel natural to the people who speak or can speak arabic -

## 2) Keywords:-

Following is the list of keywords use in Al-Noor -

<u>keyword</u>	<u>Meaning / equivalent</u>	<u>Example</u>
1. saqam	int	saqam a = 12;
2. aaim	float	aaaim b = 12.5;
3. haaf	char	ehaaf c = 'c';

- 4 - <sup>small</sup> Sahih
- 5 - LaShay
- 6 - Dalla
- 7 - in
- 8 - walakin
- 9 - waIn
- 10 - Ikhtiyar
- 11 - mithla
- 12 - Daruri
- 13 - haythuma
- 14 - bimiqdal
- 15 - ifal
- 16 - qaf
- 17 - Istimraa
- 18 - xaji

bool (boolean)  
 void (no thing)  
 def (function def)  
 if  
 else  
 else if  
 switch  
 case  
 default (necessary)  
 while  
 for ( )  
 do  
 break  
 continue  
 return

Sahih al\_natija = true;  
 Dalla <sup>↳</sup> LaShay al\_func() {}  
 Baqam Dalla al\_hisab() {}  
 in (x > 9) {}  
 • walakin { }  
 in() {} waIn {} walakin {}  
 ikhtiyar ( - ) {}  
 ikhtiyar ( - ) { mithla 'd' {} }  
 daruri { }  
~~if~~ haythuma (x < 2) {}  
 bimiqdal ( — ) {}  
 ifal {} haythuma ( ) {}  
 qaf;  
 istimraa;  
 xaji 0;

### 3) Operators and Punctuations:

<u>Category</u>	<u>Symbol</u>	<u>Description</u>
operator	+	Addition
operator	-	Subtraction
operator	*	Multiplication
operator	/	division
operator	++	increment
operator	--	decrement
Punctuation	;	terminator of statement
Punctuation	{	Start of block
Punctuation	}	end of block
Punctuation	( , )	start and end of group expression

### 4) Regular Expressions

identifier	<del>[a-zA-Z_][a-zA-Z0-9_]*</del>	variable names, a_b, ab ef
integers (eg am)	<del>(+ -)?[1-9][0-9]*</del>	<del>400, 200, 1</del>
float	<del>[0-9](.)</del>	

integers

$(+|-)? [0-9]^+$

$+16, 16, -16, 0$

float

$(+|-)? [0-9]^+ (\cdot) [0-9]^+$

$16.1, -16.1, 0.0.9$

Character

$'.'$

$'a', 'A', '9'$

Punctuation

$( ( | ) | \{ | \} | ; )$

$\{, \}$

keyword

$(baqam | qa'im | haqf | laShay |$

$in, mithla$

$Dall | in | walakin | waIn |$

$ikhtiyas | mithla | darwi |$

$haythum | ifa | bimiqdar )$

operators

$(+ | - | \div | * | ++ | --)$