Computer Project Extras

Program 1:

VDT

Datatype	Name	Purpose	Scope
long	n	Inputted variable	number()
long	format	Generated number	number()
int	i	Loop control variable	number()
long	copy	Temporary variable	number()
int	c	counter	number()
String	sentence	Inputted sentence	palin()
String	word	Extracted word	palin()
String	rev	Reversed word	palin()
int	count	counter	palin()
int	i	Loop control variable	palin()

MDT

Return Type	Signature	Purpose
void	number()	Remove duplicate variable in a number
void	palin()	Print all the palindrome words in a sentence

Program 2:

VDT

Datatype	Name	Purpose	Scope
int	n	Inputted number	accept()
int	n	Formal parameter	decitobi()
int[]	binary	Storing digits of binary number	decitobi()
int	pos	Position of array	decitobi()
int	i	Loop control variable	decitobi()
int	n	Formal parameter	decitooctal()
int[]	octal	Storing digits of octal number	decitooctal()
int	pos	Position of array	decitooctal()
int	i	Loop control variable	decitooctal()
String[]	hex	Storing digits of hexadecimal number	decitohex()
int	pos	Position of array	decitohex()
String[]	hexDigits	Initialising hexadecimal digits	decitohex()
int	i	Loop control variable	decitohex()

MDT

Return Type	Signature	Purpose
void	accept()	Control the other methods
void	decitobi(int n)	Convert decimal to binary
void	decitooctal(int n)	Convert decimal to octal
void	decitohex(int n)	Convert decimal to hex

Program 3 (Student):

VDT

Datatype	Name	Purpose	Scope
int	roll	Roll number of student	Student
String	name	Name of student	Student
Dates	dob	Date of birth of student	Student
int	age	Store the age of student	display()
int	age	Calculate the age	calculateAge()
int	dd	Date	Student>Dates
int	mm	Month	Student>Dates
int	yy	Year	Student>Dates

MDT

Return Type	Signature	Purpose
void	accept()	Accept data
void	display(Dates currentDate)	Display data
int	calculateAge(Dates dob, Dates currentDate)	Calculate age of the student
void	accept()	Accept data
void	display()	Display data

Program 4:

VDT

Datatype	Name	Purpose	Scope
int	base	Base number of series	Program4
int	power	Power of term	Program4
double	sum	Sum of series	Program4
double	term	Term of series	series1()
double	factorial	Factorial of n	series1()
int	i	Loop control variable	series1()
double	sign	Positive or negative control	series2()
double	term	Term of series	series2()
int[]	fib	Array to store n number of consecutive Fibonacci numbers	series2()
int	i	Loop control variable	series2()
int	choice	Choice of user	main()

MDT

Return Type	Signature	Purpose
void	input()	Input data members
void	series1()	Generate sum of first series
void	series2()	Generate sum of second series
void	main()	Control other methods

Program 5:

VDT

Datatype	Name	Purpose	Signature
String	rev	Reversed text	reverse()
int	i	Loop control variable	reverse()
String[]	arr	Storing reverse of ASCII of letters	main()
String	word	Formation of word	main()
int	i	Loop control variable	main()

MDT

Return Type	Signature	Purpose
String	reverse()	Reverse a String
void	main()	Control the the functioning of the class

Program 6 (Time):

VDT

Datatype	Name	Purpose	Scope
int	hh	Hour	Time
int	mm	Minute	Time

MDT

Return Type	Signature	Purpose
void	readtime()	Enter data members
Time	addTime(TimeX)	To add two time values
Time	diffTime(Time X)	To subtract two time values
void	disptime()	Display time
void	main()	Control other methods

Program 7:

VDT

Datatype	Name	Purpose	Scope
String	sentence	Inputting the sentence from user	main()
String	word	Extracting word	main()
String	format	Forming new sentence	main()
int	i	Outer loop	main()
int	j	Inner loop	main()
String	s1	Storing only vowels of the extracted word	main()
String	s2	Storing only consonants of the extracted word	main()

MDT

Return Type	Signature	Purpose
void	main()	Main functioning of the program

Program 8 (Sentence):

VDT

Datatype	Name	Purpose	Scope
String	WD	Word to search	Sentence
String	sen	Inputted sentence	Sentence
String[]	arr	Storing extracted words	Sentence
int	c	Counting words	Sentence()
int	i	Loop control variable	Sentence()
String	word	Extract words	extract()
int	c	Counter	extract()
int	i	Loop control variable	extract()
int	i	Outer loop	sort()
int	j	Inner loop	sort()
String	temp	Temporary variable	sort()
int	l	Left control	search()
int	r	Right control	search()
int	m	Middle term	search()
int	f	Flag variable	search()

MDT

Return Type	Signature	Purpose
void	extract()	Extract words and store them in the array
void	sort()	Sort the words lexicographically
void	search(String word)	Search a word given as input by the user
void	create()	To control other methods

Program 9:

VDT

Datatype	Name	Purpose	Scope
String[]	a	Store words of a sentence	Program9
String[]	b	Store the piglatin form of the words	Program9
int	i	Loop control variable	input()
String	format	Form the piglatin words	convert()
int	i	Loop control variable	convert()
int	i	Loop control variable	change()
int	i	Loop control variable	display()

MDT

Return Type	Signature	Purpose
void	input()	Input data members
String	convert(String p)	Convert words into piglatin form
void	change()	Store converted words in array b[]
void	display()	Display data members
void	main()	To control other methods

Program 10 (Search):

VDT

Datatype	Name	Purpose	Scope
String	a	Sentence A	Search
String	b	Sentence B	Search
String	a	Sentence A	Search()
String	b	Sentence B	Search()
String	wordA	Extract words from sentence A	find1()
String	wordB	Extract words from sentence B	find1()
int	i	Outer loop	find1()
int	j	Inner loop	find1()
String	word	Extract words from Sentence A	find2()
String	maxword	Store the longest word	find2()
int	maxlen	Store the length of the longest word	find2()
int	i	Loop control variable	find2()

MDT

Return Type	Signature	Purpose
void	find1()	Find the common words in both the sentences
void	find2()	Find the longest word in sentence A
void	test()	Control other methods

Program 11:

VDT

Datatype	Name	Purpose	Scope
int[]	a	Store the elements each row	Program11
int[][]	b	Input the matrix	Program11
int	row	Store the number of rows	Program11
int	col	Store the number of columns	Program11
int	i	Outer loop	input()
int	j	Inner loop	input()
int	i	Outer loop	sort()
int	j	Inner loop	sort()
int	t	Temporary variable	sort()
int	i	Outer loop	extract()
int	j	Inner loop	extract()
int	i	Outer loop	display()
int	j	Inner loop	display()
int	i	Outer loop	square()
int	j	Inner loop	square()
int	k	Temporary variable	square()
int	t	Space counter	square()
int	p	Space loop	square()

MDT

Return Type	Signature	Purpose
void	input()	Input data members
void	sort()	Sort the array a[]
void	extract()	Sort each row in the matrix
void	display()	Display the matrix
void	square()	Print the pattern